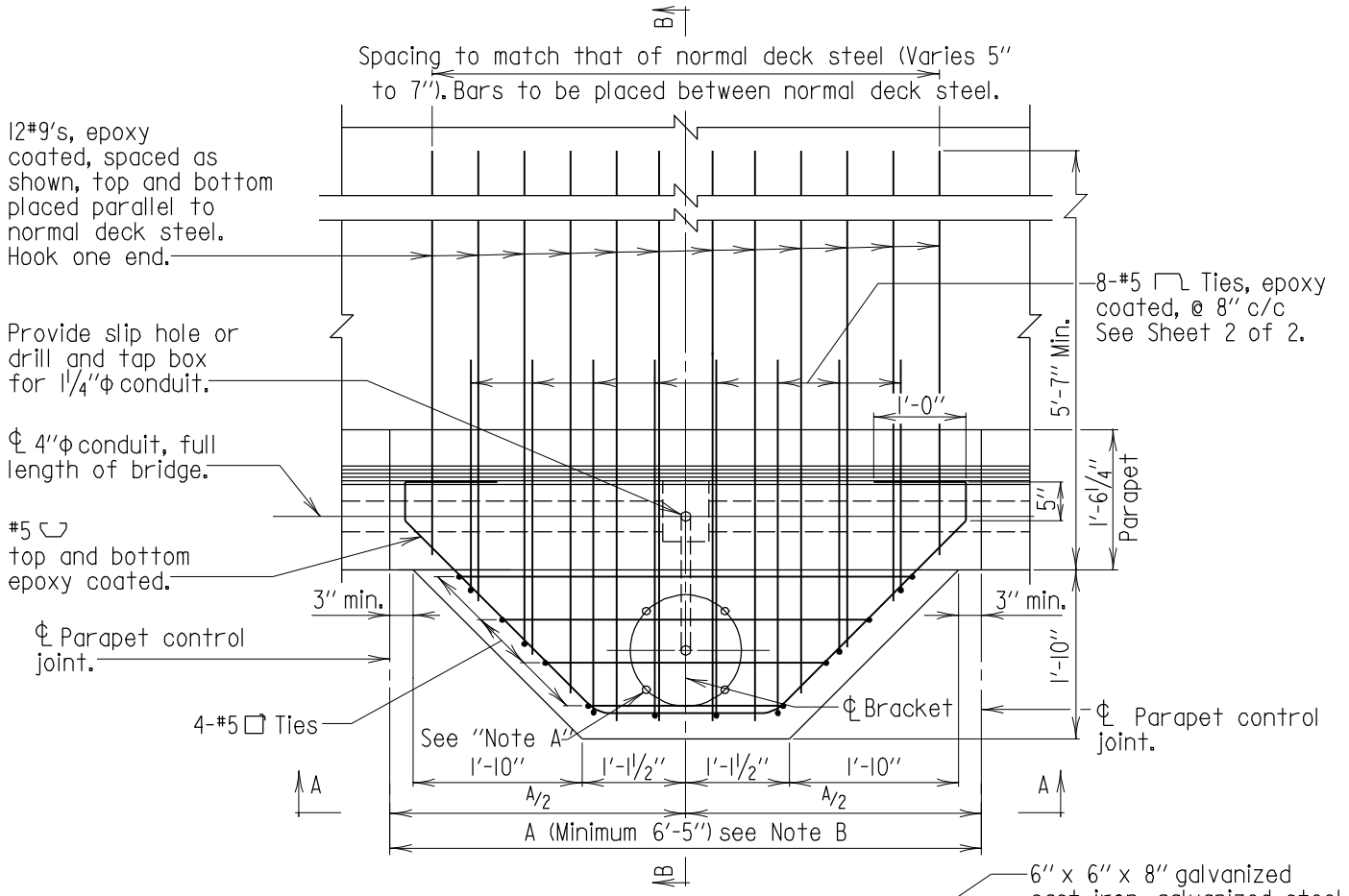
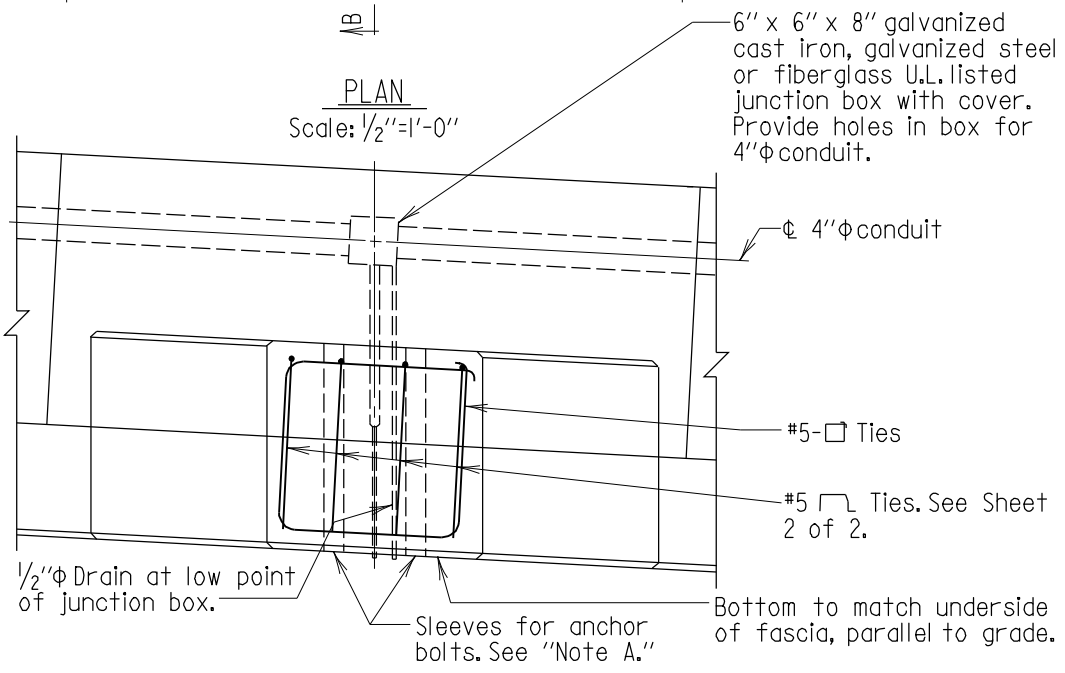




Note B:
Station for light post support bracket shown on Plans is only approximate. ℄ Bracket to be located midway between parapet control joints.
A = Normal parapet control joint spacing (adjust as necessary to meet minimum limitations).
If a light post is placed at ℄ of pier, eliminate the control joint at the ℄ of pier, The first control joint beyond, on one side only shall be changed to a paraffin joint.

SECTION A-A
Scale: 1/2"=1'-0"

For Section "B-B" see Sheet 2 of 2.

Note:
Normal deck reinforcing steel not shown.

Note A:
Contractor is to contact the District Engineer in writing prior to placing sleeves for anchor bolts, to ascertain the bolt circle dimension and size of anchor bolts that will be used on this project. All light poles to be set plumb using leveling nuts on anchor bolts. Max. height of pole for this detail is 40'.

34'' STRAIGHT BACK

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 2/18/76

REVISIONS	
SHA	FHWA
1-8-93	·
9-24-96	·
6-1-05	·
1-9-08	·

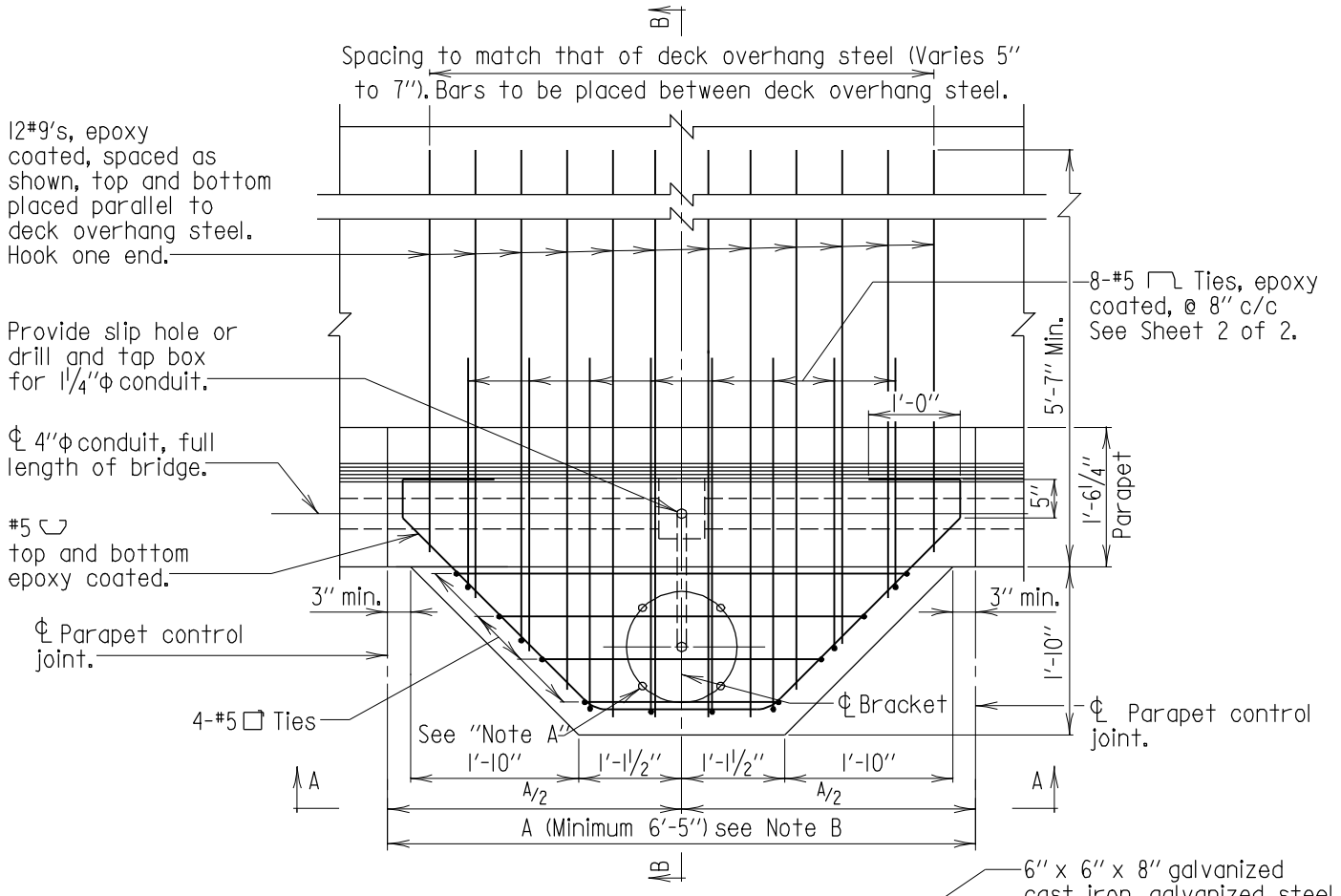
FHWA APPROVAL
DATE: 8-24-76

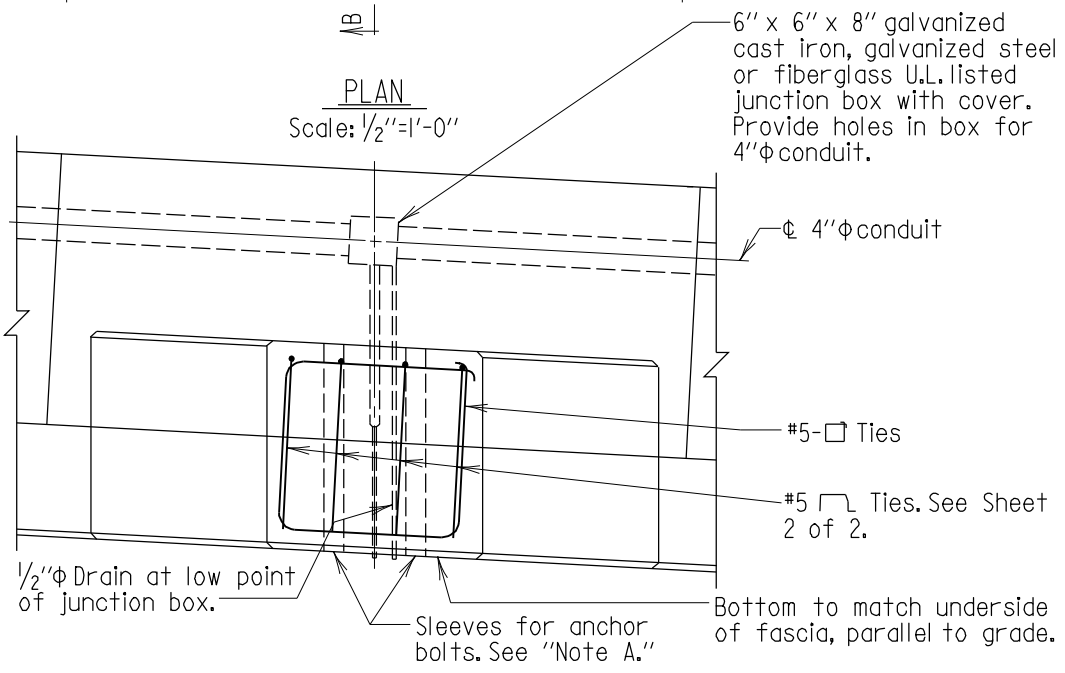
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH SINGLE CONDUIT AND 34" F-SHAPE PARAPET WITH STRAIGHT BACK

STANDARD NO. BR-SS(6.04)-05-7A SHEET 1 OF 2

SUPER-CONCRETE WORK





Note B:
Station for light post support bracket shown on Plans is only approximate. ℄ Bracket to be located midway between parapet control joints.
A = Normal parapet control joint spacing (adjust as necessary to meet minimum limitations).
If a light post is placed at ℄ of pier, eliminate the control joint at the ℄ of pier, The first control joint beyond, on one side only shall be changed to a paraffin joint.

SECTION A-A
Scale: 1/2"=1'-0"

For Section "B-B" see Sheet 2 of 2.

Note:
Deck overhang reinforcing steel not shown.

Note A:
Contractor is to contact the District Engineer in writing prior to placing sleeves for anchor bolts, to ascertain the bolt circle dimension and size of anchor bolts that will be used on this project. All light poles to be set plumb using leveling nuts on anchor bolts. Max. height of pole for this detail is 40'.

34'' STRAIGHT BACK

APPROVAL
E S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 2/18/76

REVISIONS	
SHA	FHWA
9-24-96	·
6-1-05	·
10-9-07	·
1-9-08	·

FHWA APPROVAL
DATE: 8-24-76

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

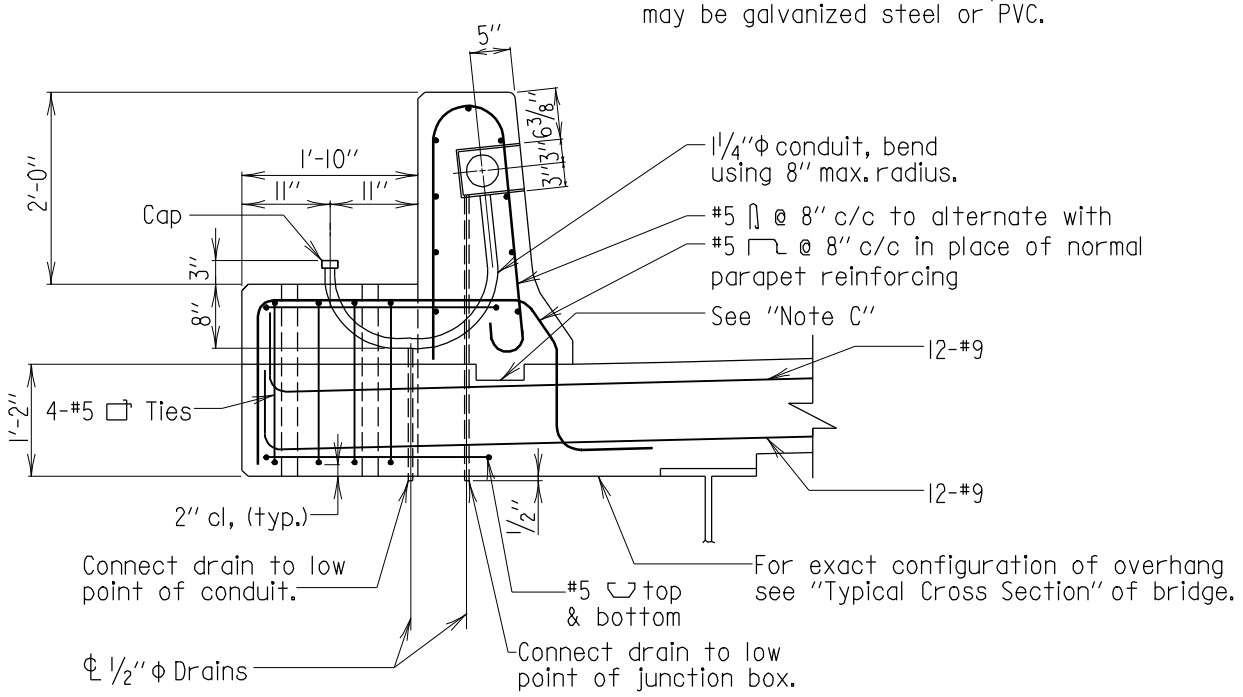
VERIFIED 10-9-2007 LRFD

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH SINGLE CONDUIT AND 34" F-SHAPE PARAPET WITH STRAIGHT BACK

STANDARD NO. BR-SS(6.04)-05-7A(L) SHEET 1 OF 2

SUPER-CONCRETE WORK

Note:
Conduit, drain tubes and cap
may be galvanized steel or PVC.



SECTION B-B FOR "F-SHAPE" BARRIER

Scale: 1/2"=1'-0"

Note:
All longitudinal bars are #5's and shall be placed continuously in the parapet from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multispan bridge. Refer to BR-SS(6.02)-03-27A.

Note C:
The constr. jt. between the F-shape parapet and the deck may vary slightly from the joint indicated. For exact details and location of the joint see "Superstructure" Sheet.

34'' STRAIGHT BACK

APPROVAL
C S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 2/18/76

REVISIONS	
SHA	FHWA
8-4-92	·
9-24-96	·
8-7-98	·
6-1-05	·

FHWA APPROVAL
DATE: 8-24-76

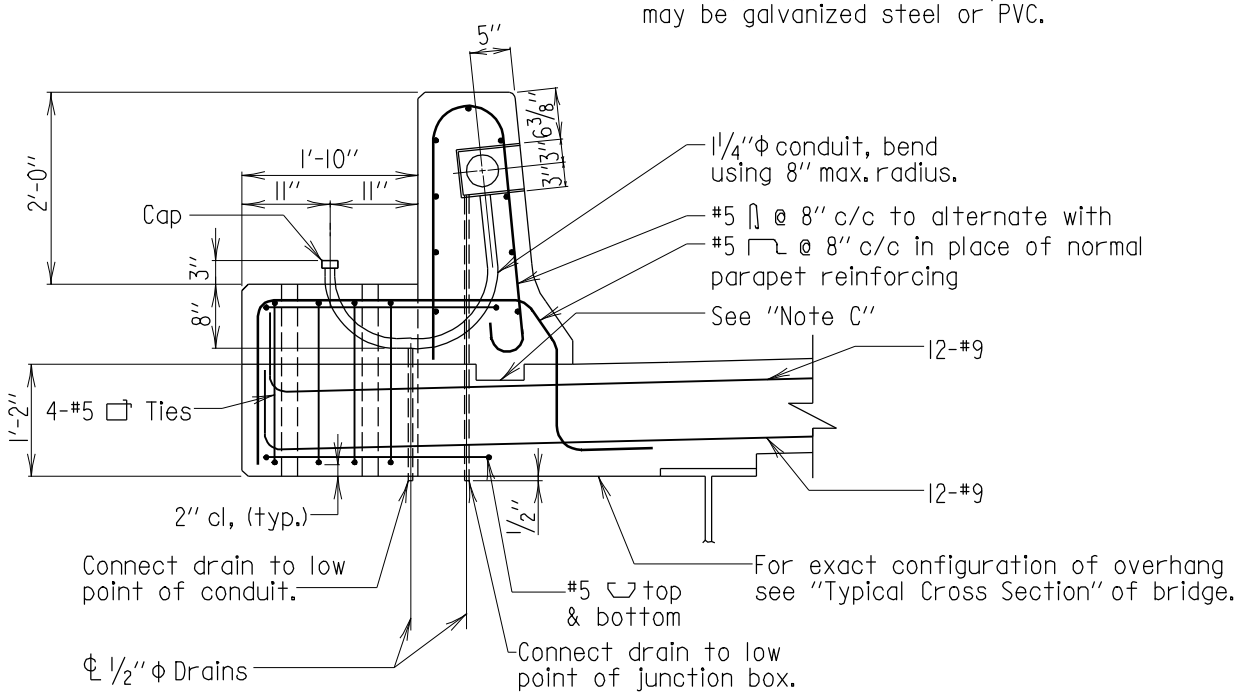
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH SINGLE CONDUIT AND 34" F-SHAPE PARAPET WITH STRAIGHT BACK

STANDARD NO. BR-SS(6.04)-05-7A SHEET 2 OF 2

SUPER-CONCRETE WORK

Note:
Conduit, drain tubes and cap
may be galvanized steel or PVC.



SECTION B-B FOR "F-SHAPE" BARRIER

Scale: 1/2"=1'-0"

Note:
All longitudinal bars are #5's and shall be placed continuously in the parapet from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multispan bridge. Refer to BR-SS(6.02)-03-27A.

Note C:
The constr. jt. between the F-shape parapet and the deck may vary slightly from the joint indicated. For exact details and location of the joint see "Superstructure" Sheet.

34'' STRAIGHT BACK

APPROVAL
C S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 2/18/76

REVISIONS	
SHA	FHWA
9-24-96	·
8-7-98	·
6-1-05	·
10-9-07	·

FHWA APPROVAL
DATE: 8-24-76

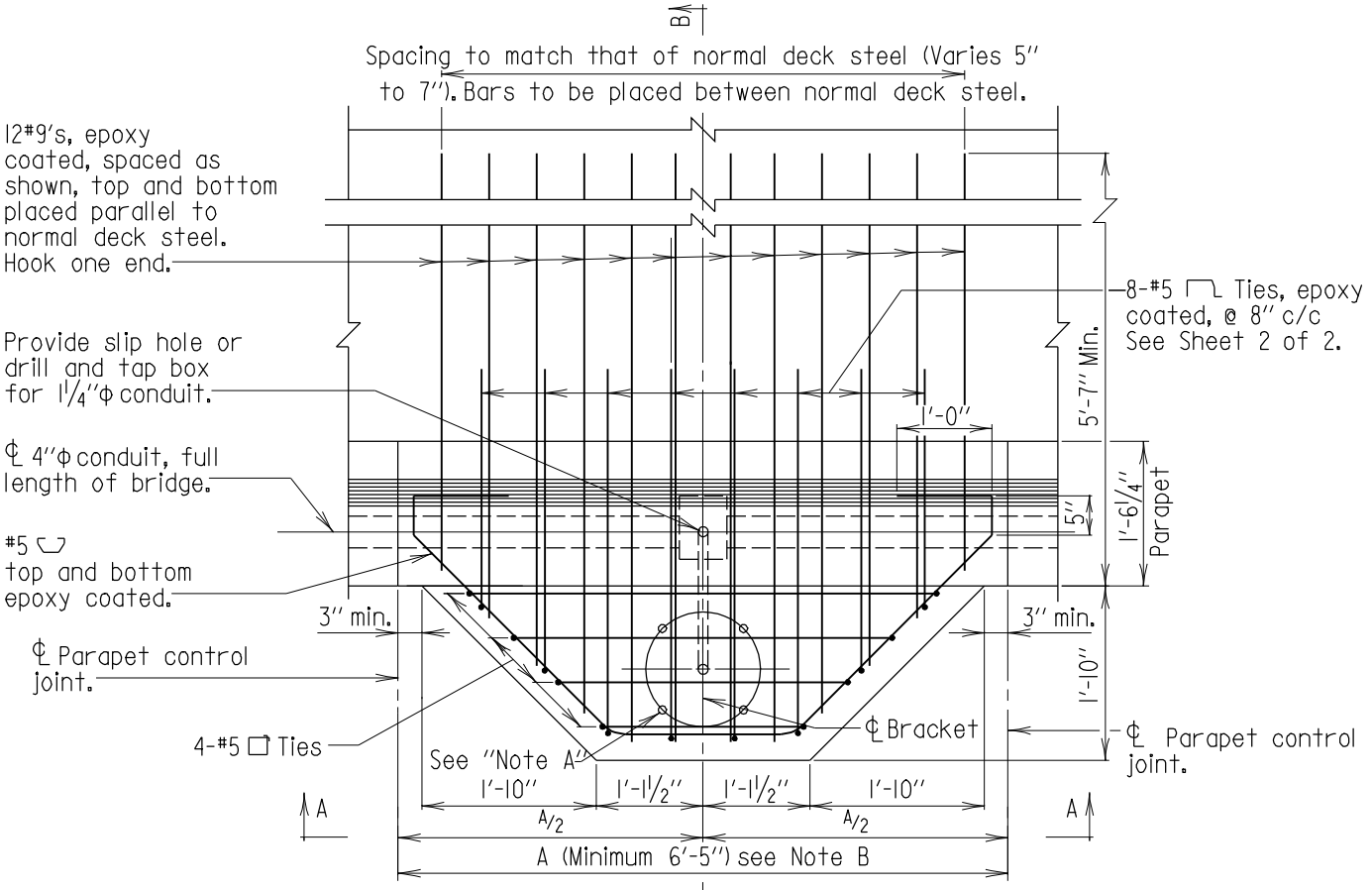
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

VERIFIED 10-9-2007 LRFD

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH SINGLE CONDUIT AND 34" F-SHAPE PARAPET WITH STRAIGHT BACK

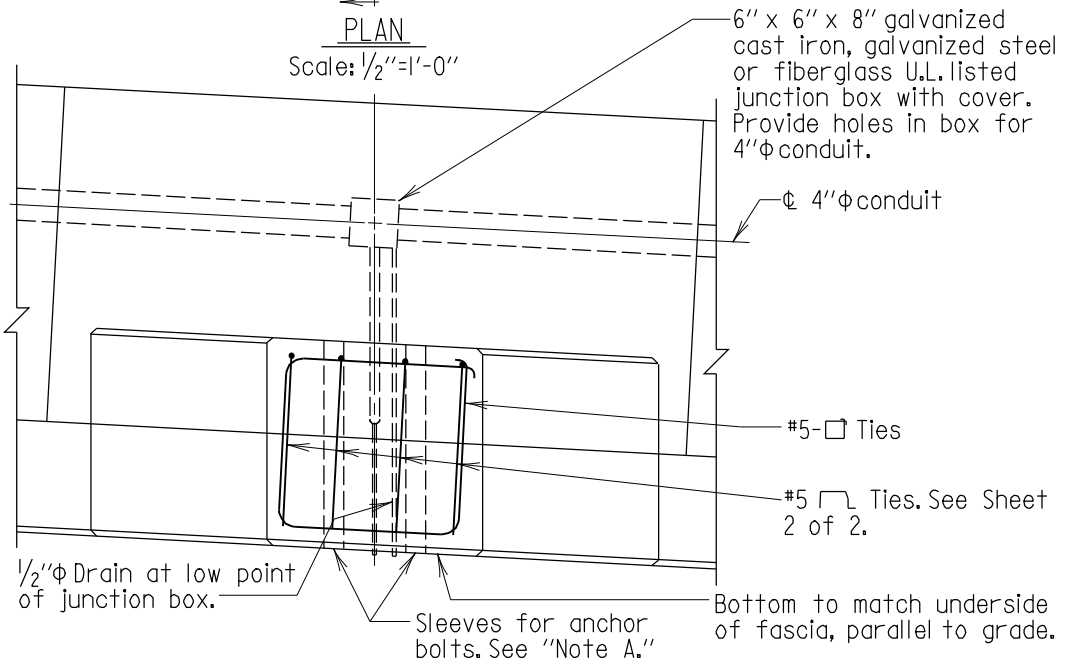
STANDARD NO. BR-SS(6.04)-05-7A(L) SHEET 2 OF 2

SUPER-CONCRETE WORK



PLAN

Scale: ½"=1'-0"



SECTION A-A

Scale: ½"=1'-0"

Note B:
Station for light post support bracket shown on Plans is only approximate. ℄ Bracket to be located midway between parapet control joints.
A = Normal parapet control joint spacing (adjust as necessary to meet minimum limitations).
If a light post is placed at ℄ of pier, eliminate the control joint at the ℄ of pier, The first control joint beyond, on one side only shall be changed to a paraffin joint.

Note:
Normal deck reinforcing steel not shown.

Note A:
Contractor is to contact the District Engineer in writing prior to placing sleeves for anchor bolts, to ascertain the bolt circle dimension and size of anchor bolts that will be used on this project. All light poles to be set plumb using leveling nuts on anchor bolts. Max. height of pole for this detail is 40'.

For Section "B-B" see Sheet 2 of 2.

42'' STRAIGHT BACK

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
1-9-08	·
·	·
·	·
·	·

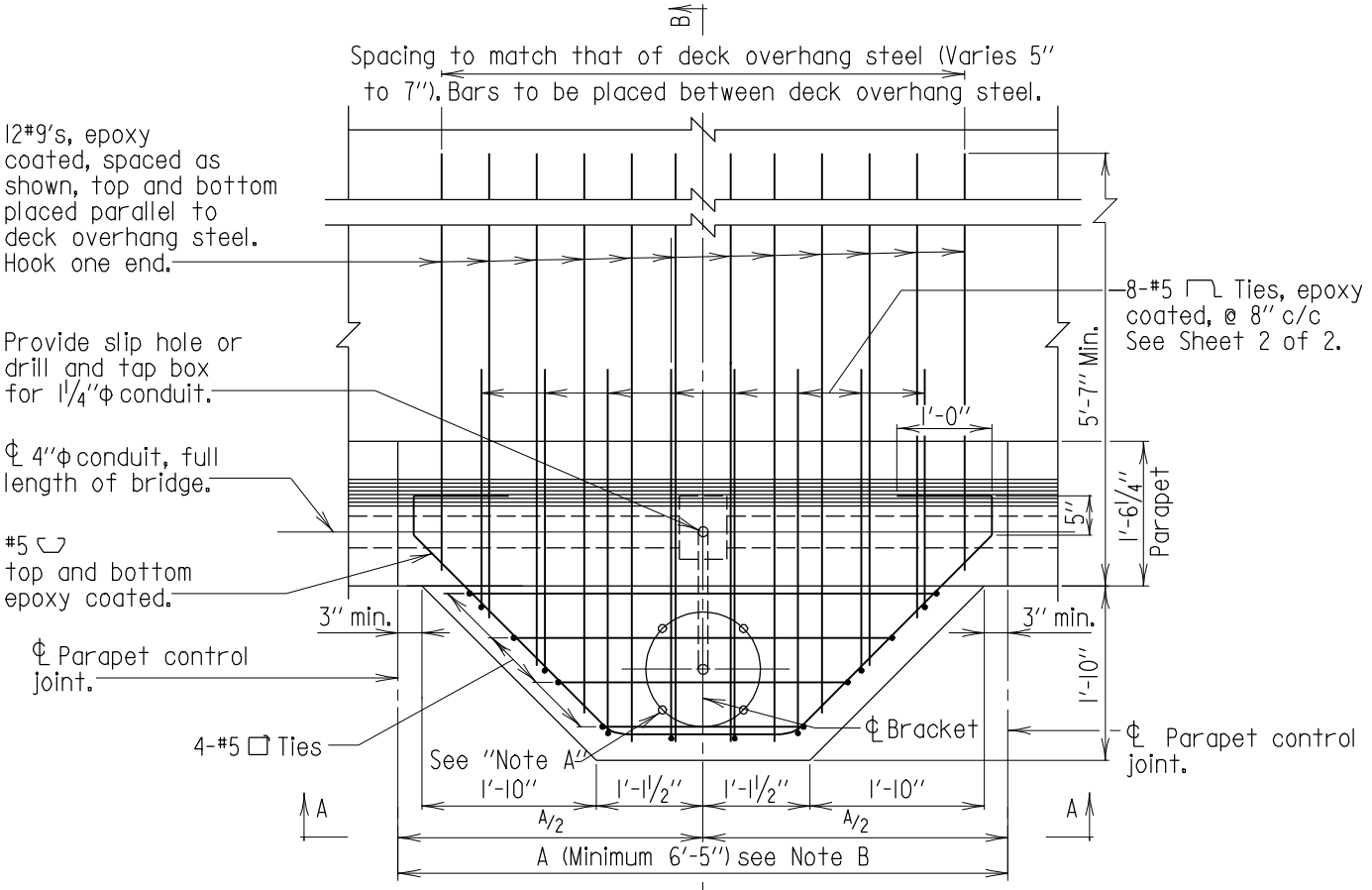
FHWA APPROVAL
DATE: .

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH SINGLE CONDUIT AND 42'' F-SHAPE PARAPET WITH STRAIGHT BACK

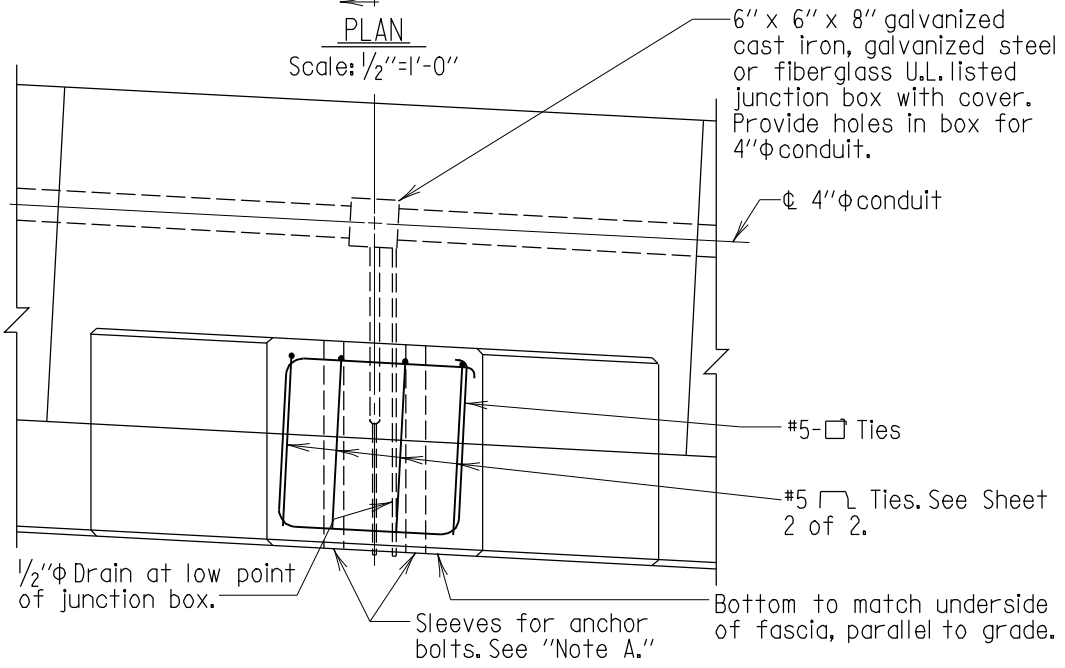
STANDARD NO. BR-SS(6.04)-05-7B SHEET 1 OF 2

SUPER-CONCRETE WORK



PLAN

Scale: ½"=1'-0"



SECTION A-A

Scale: ½"=1'-0"

Note B:
Station for light post support bracket shown on Plans is only approximate. ℄ Bracket to be located midway between parapet control joints.
A = Normal parapet control joint spacing (adjust as necessary to meet minimum limitations).
If a light post is placed at ℄ of pier, eliminate the control joint at the ℄ of pier, The first control joint beyond, on one side only shall be changed to a paraffin joint.

Note:
Deck overhang reinforcing steel not shown.

Note A:
Contractor is to contact the District Engineer in writing prior to placing sleeves for anchor bolts, to ascertain the bolt circle dimension and size of anchor bolts that will be used on this project. All light poles to be set plumb using leveling nuts on anchor bolts. Max. height of pole for this detail is 40'.

For Section "B-B" see Sheet 2 of 2.

42'' STRAIGHT BACK

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
10-9-07	·
1-9-08	·
·	·
·	·

FHWA APPROVAL		
DATE:	·	·

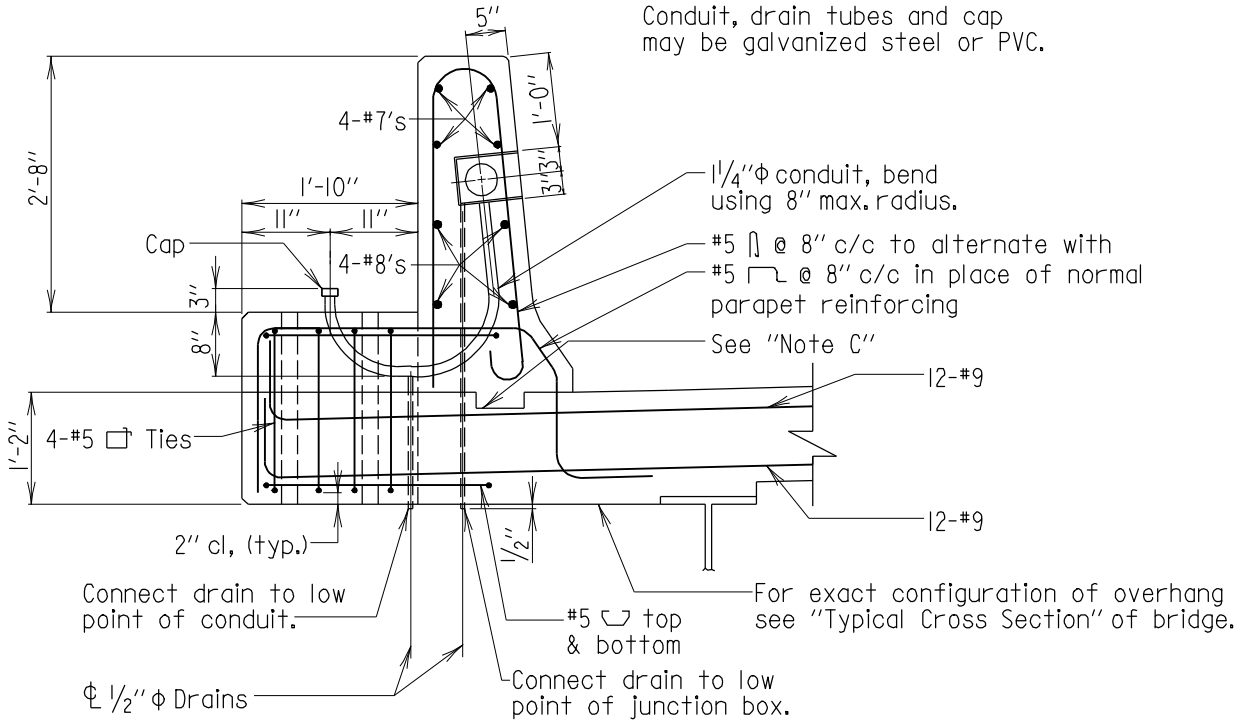
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

VERIFIED 10-9-2007 LRFD

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH SINGLE CONDUIT AND 42'' F-SHAPE PARAPET WITH STRAIGHT BACK

STANDARD NO. BR-SS(6.04)-05-7B(L) SHEET 1 OF 2

SUPER-CONCRETE WORK



SECTION B-B FOR ''F-SHAPE'' BARRIER

Scale: ½''=1'-0''

Note:
All #7 and #8 bars shall be placed continuously in the parapet from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multispan bridge. Refer to BR-SS(6.02)-03-27B.

Note C:
The constr. jt. between the F-shape parapet and the deck may vary slightly from the joint indicated. For exact details and location of the joint see ''Superstructure'' Sheet.

42'' STRAIGHT BACK

APPROVAL
C S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA

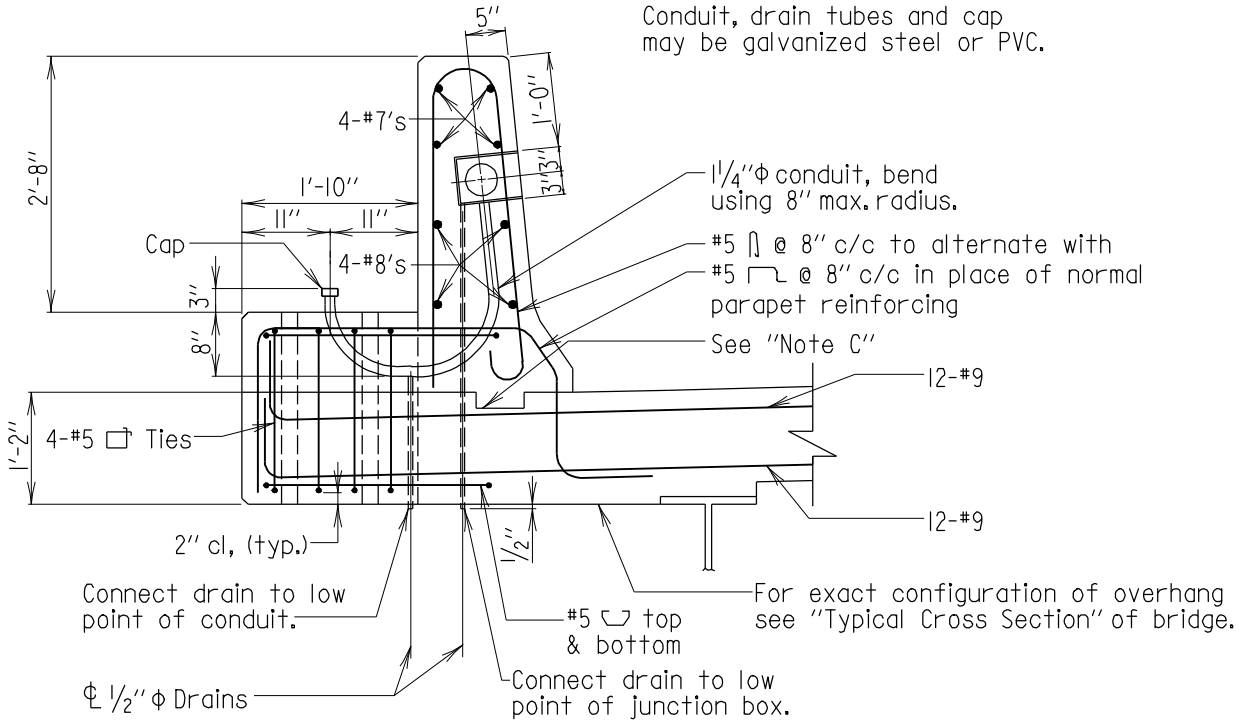
FHWA APPROVAL
DATE:

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH SINGLE CONDUIT AND 42'' F-SHAPE PARAPET WITH STRAIGHT BACK

STANDARD NO. BR-SS(6.04)-05-7B SHEET 2 OF 2

SUPER-CONCRETE WORK



SECTION B-B FOR ''F-SHAPE'' BARRIER

Scale: ½''=1'-0''

Note:
All #7 and #8 bars shall be placed continuously in the parapet from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multispan bridge. Refer to BR-SS(6.02)-03-27B.

Note C:
The constr. jt. between the F-shape parapet and the deck may vary slightly from the joint indicated. For exact details and location of the joint see ''Superstructure'' Sheet.

42'' STRAIGHT BACK

APPROVAL
C S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
10-9-07	·
·	·
·	·
·	·

FHWA APPROVAL
DATE: ·

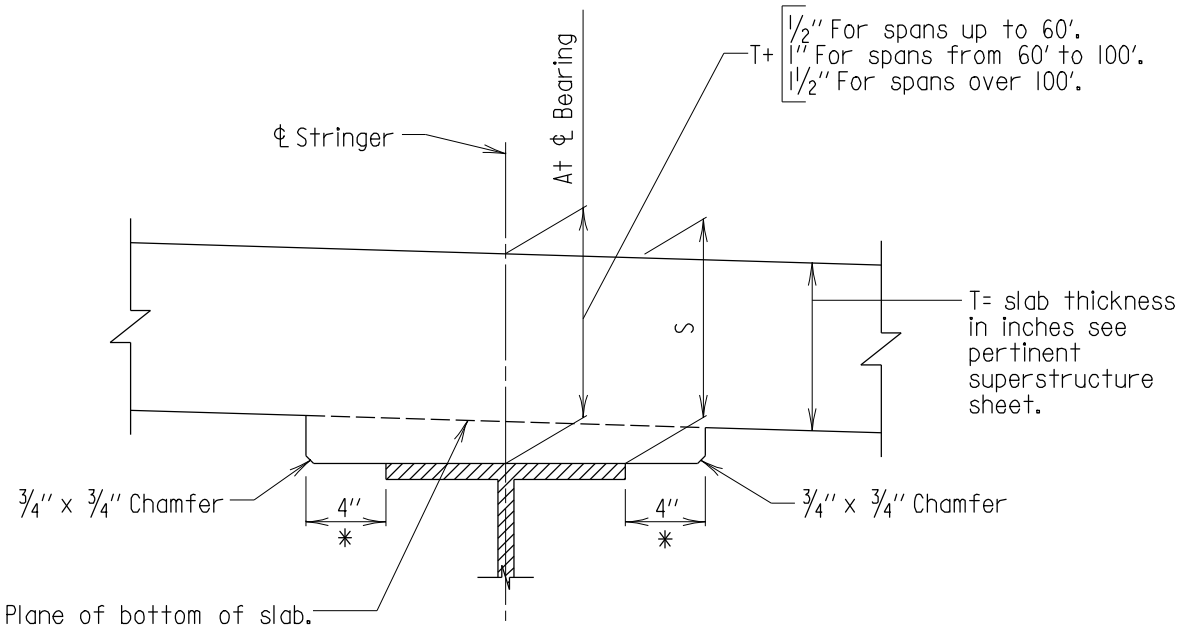
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

VERIFIED 10-9-2007 LRFD

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH SINGLE CONDUIT AND 42'' F-SHAPE PARAPET WITH STRAIGHT BACK

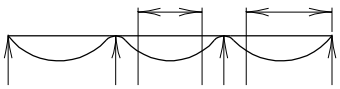
STANDARD NO. BR-SS(6.04)-05-7B(L) SHEET 2 OF 2

SUPER-CONCRETE WORK



SECTION
Scale: None

Notes:
1. * Omit concrete haunch by dropping bottom of concrete slab to bottom of top flange on spans of 30'-0" or less c/c of bearings.
2. Dimension 'S' at either edge of stringer, for its full length, as shown above, must not be less than dimension 'T', therefore, check this dimension along both edges of stringers at each elevation point shown on "Bridge Deck Elevation" sheet prior to placing any form work. In determining the depth of haunch for continuous bridges the span length shall be considered to be the distance from the abutment support to the dead load contraflexure for end spans and between the contraflexure points for intermediate spans. Where cover plates and/or varying thicknesses of top flanges are utilized, this increase in depth shall be taken into account in determining the slab plus haunch thickness at ℄ of bearing.



FOR OFFICE USE ONLY

APPROVAL
R.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 2/18/76

REVISIONS	
SHA	FHWA
5-14-76	10-3-80
·	·
·	·
·	·

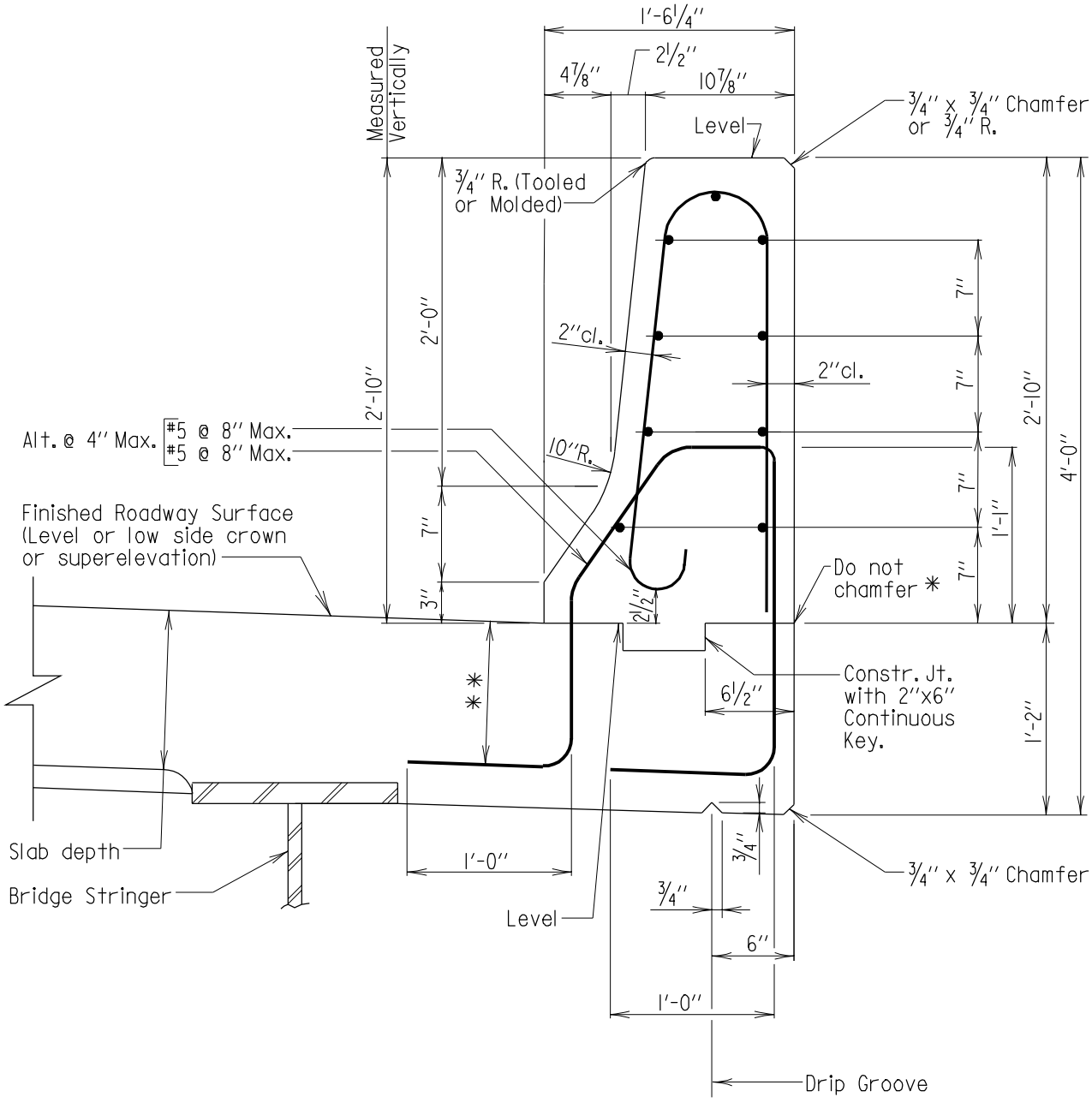
FHWA APPROVAL
DATE: 8-24-76

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

CONCRETE HAUNCH DETAIL
DECKS FORMED WITH TIMBER

STANDARD NO. BR-SS(6.05)-75-19 SHEET 1 OF 1

SUPER - CONCRETE WORK



SECTION

Scale: 1" = 1'-0"

* In order to insure a smooth and acceptable surface, 420.03.11 (Construction joints) will be strictly adhered to.

** Slab depth minus 1".

Notes:

1. All longitudinal bars are #5 spaced as shown and shall be placed continuously in the parapet from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multi span bridge.
2. Key is nominal size.
3. Front face of parapet to be dimensioned from a plumb line.
4. All reinforcing steel to be epoxy coated.
5. Concrete deck reinforcing steel not shown.

34'' STRAIGHT BACK TL-4 BRIDGE RAILING

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 2/25/77

REVISIONS	
SHA	FHWA
1-4-94	·
6-27-94	·
10-22-03	·
11-26-07	·

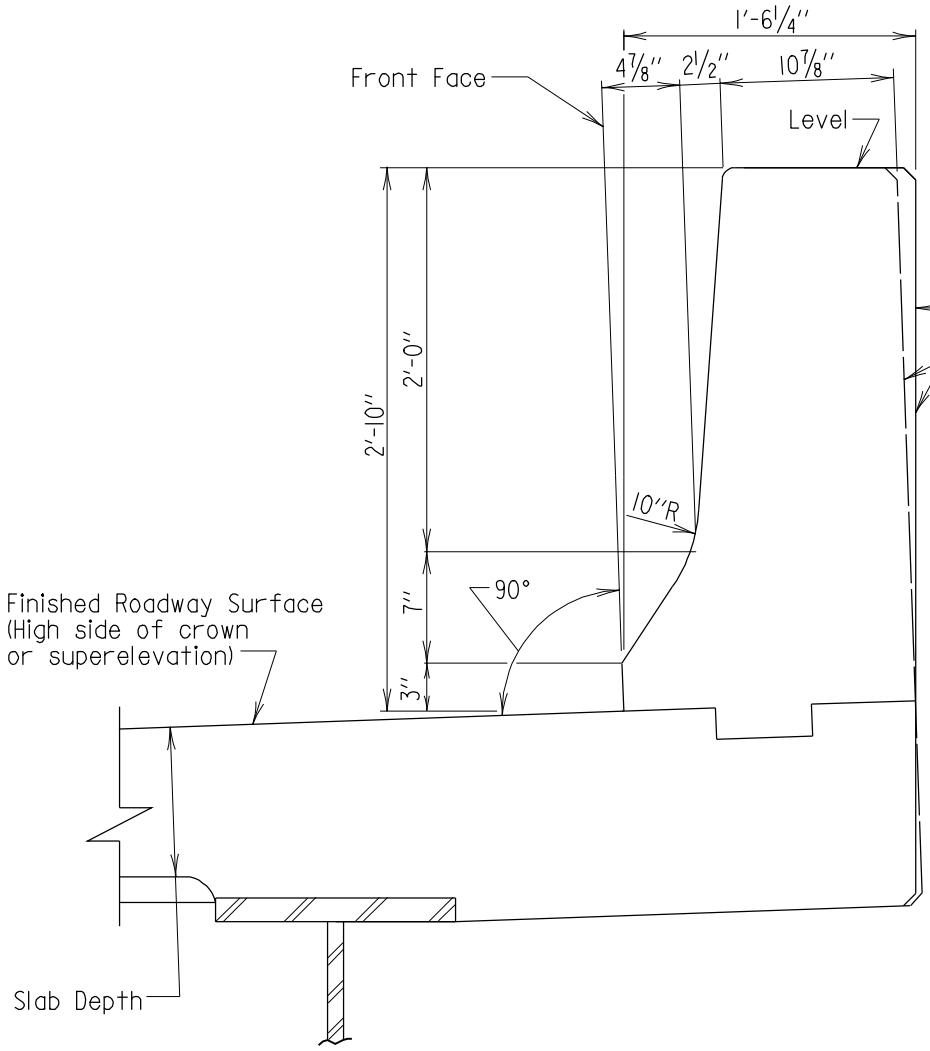
FHWA APPROVAL
DATE: 7-15-03

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

LEVEL OR LOW SIDE OF CROWN (OR SUPERELEVATED) SECTION OF 34" F-SHAPE PARAPET WITH STRAIGHT BACK

STANDARD NO. BR-SS(6.02)-03-27A SHEET 1 OF 2

SUPER CONCRETE WORK



SECTION

Scale: 1" = 1'-0"

34" STRAIGHT BACK TL-4 BRIDGE RAILING

Note:
For all details not shown see sheet 1 of 2.

APPROVAL
E.S. Friedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 5/14/81

REVISIONS	
SHA	FHWA
3-9-89	3-5-90
11-7-90	·
10-22-03	·
11-26-07	·

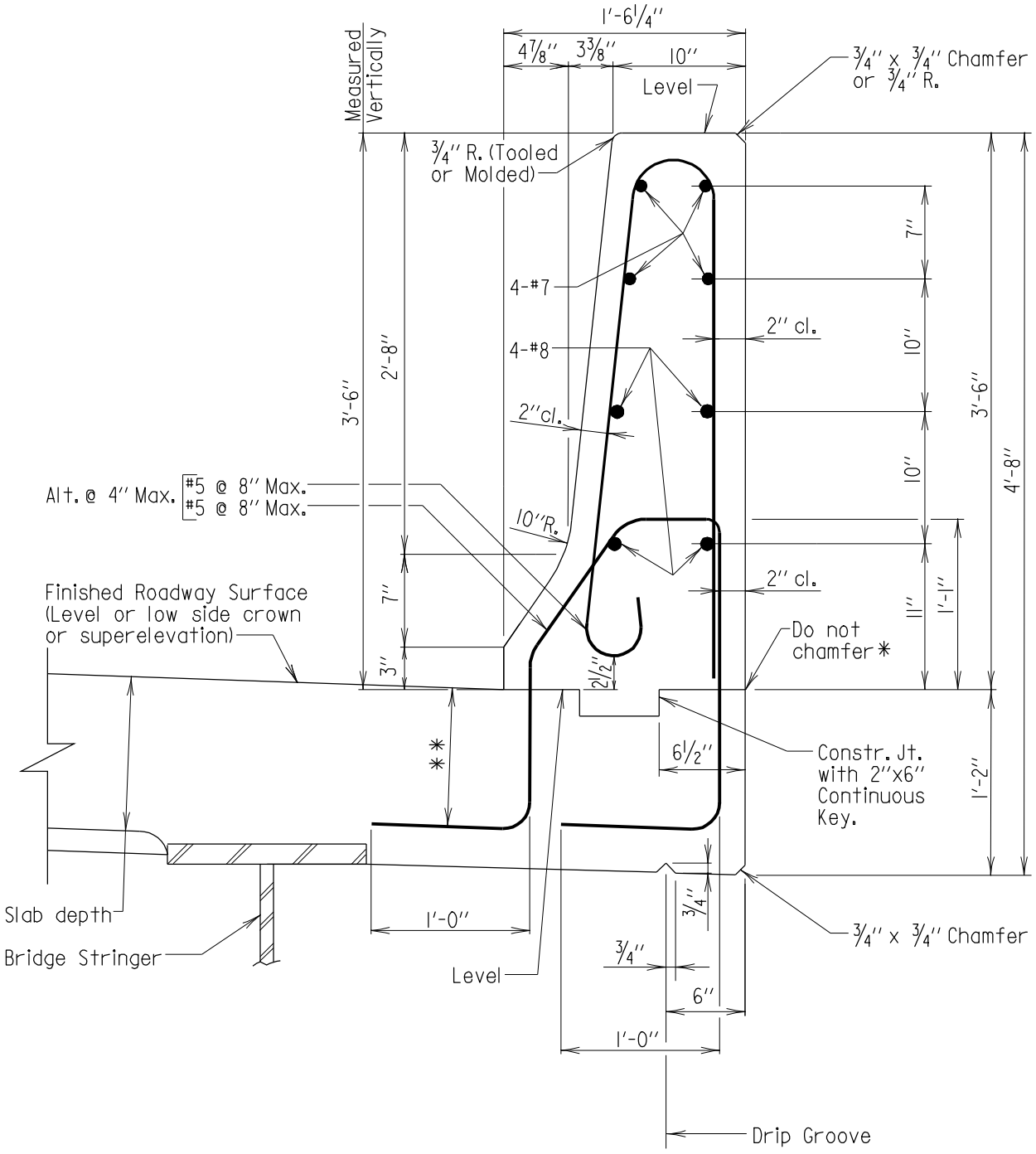
FHWA APPROVAL
DATE: 7-15-03

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

HIGH SIDE OF CROWN (OR SUPERELEVATED) SECTION OF 34" F-SHAPE PARAPET WITH STRAIGHT BACK

STANDARD NO. BR-SS(6.02)-03-27A SHEET 2 OF 2

SUPER CONCRETE WORK



SECTION

Scale: 1" = 1'-0"

* In order to insure a smooth and acceptable surface, 420.03.11 (Construction joints) will be strictly adhered to.

** Slab depth minus 1".

Notes:

1. All #7 and #8 longitudinal bars shall be placed continuously in the parapet from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multi span bridge.
2. Key is nominal size.
3. Front face of parapet to be dimensioned from a plumb line.
4. All reinforcing steel to be epoxy coated.
5. Concrete deck reinforcing steel not shown.

42'' STRAIGHT BACK TL-5 BRIDGE RAILING

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 10/22/03

REVISIONS	
SHA	FHWA
11-26-07	·
·	·
·	·
·	·

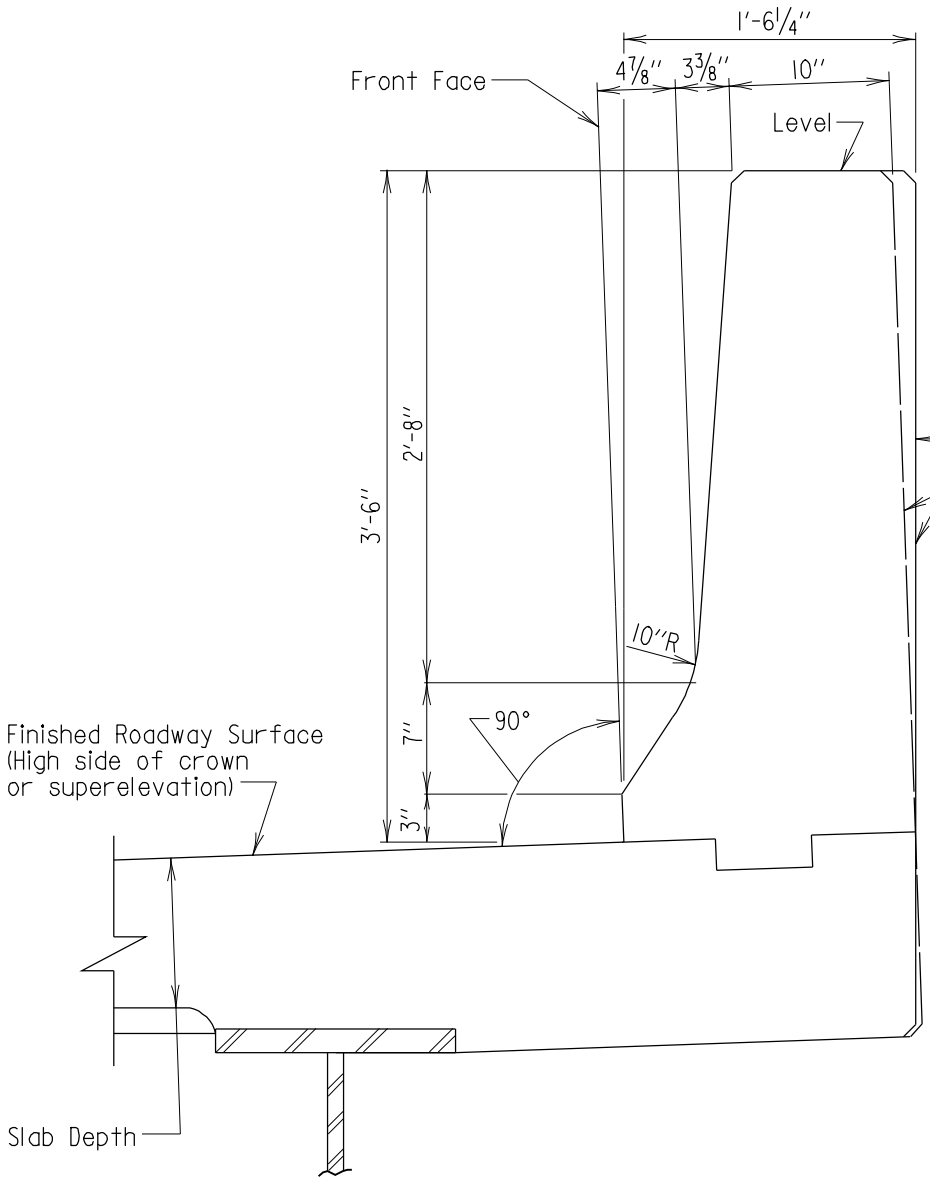
FHWA APPROVAL
DATE: 7-15-03

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

LEVEL OR LOW SIDE OF CROWN (OR SUPERELEVATED) SECTION OF 42" F-SHAPE PARAPET WITH STRAIGHT BACK

STANDARD NO. BR-SS(6.02)-03-27B SHEET 1 OF 2

SUPER CONCRETE WORK



Front face configuration of parapet shall be constructed perpendicular to roadway surface.

Plumb

Contractor has the option of either constructing rear face plumb or on a slope perpendicular to roadway surface. However, whatever option is chosen must be used throughout all structure(s) at a particular crossing. No additional compensation will be provided to the contractor for whatever option is chosen.

SECTION

Scale: 1" = 1'-0"

42" STRAIGHT BACK TL-5 BRIDGE RAILING

Note:
For all details not shown see sheet 1 of 2.

APPROVAL
E.S. Friedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 10/22/03

REVISIONS	
SHA	FHWA
11-26-07	·
·	·
·	·
·	·

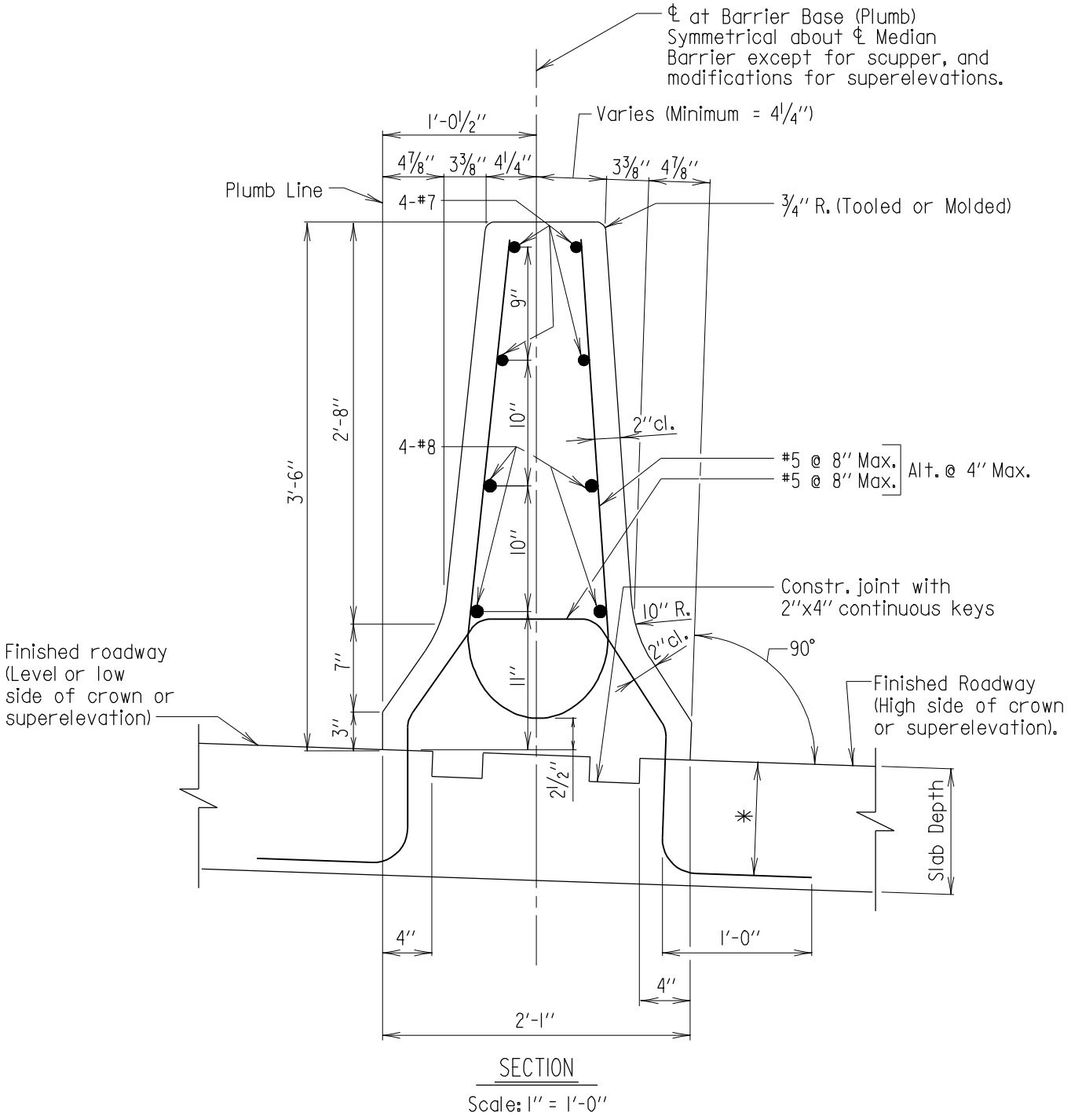
FHWA APPROVAL
DATE: 7-15-03

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

HIGH SIDE OF CROWN (OR SUPERELEVATED) SECTION OF 42" F-SHAPE PARAPET WITH STRAIGHT BACK

STANDARD NO. BR-SS(6.02)-03-27B SHEET 2 OF 2

SUPER CONCRETE WORK



SECTION

Scale: 1" = 1'-0"

* Slab depth minus 1".

Notes:

1. Place 1/2" saw cut joints to match joint spacing of outside parapet.
2. Concrete deck reinforcing steel not shown.
3. All #7 and #8 longitudinal bars shall be placed continuously in the barrier from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multi span bridge.
4. All keys are nominal size.
5. No increase in any prices bid will be allowed for barrier modifications due to roadway slope.

42" MEDIAN TL-5 BRIDGE RAILNG

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 3/25/77

REVISIONS	
SHA	FHWA
9-26-89	3-5-90
10-31-90	·
10-22-03	·
11-26-07	·

FHWA APPROVAL
DATE: .

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

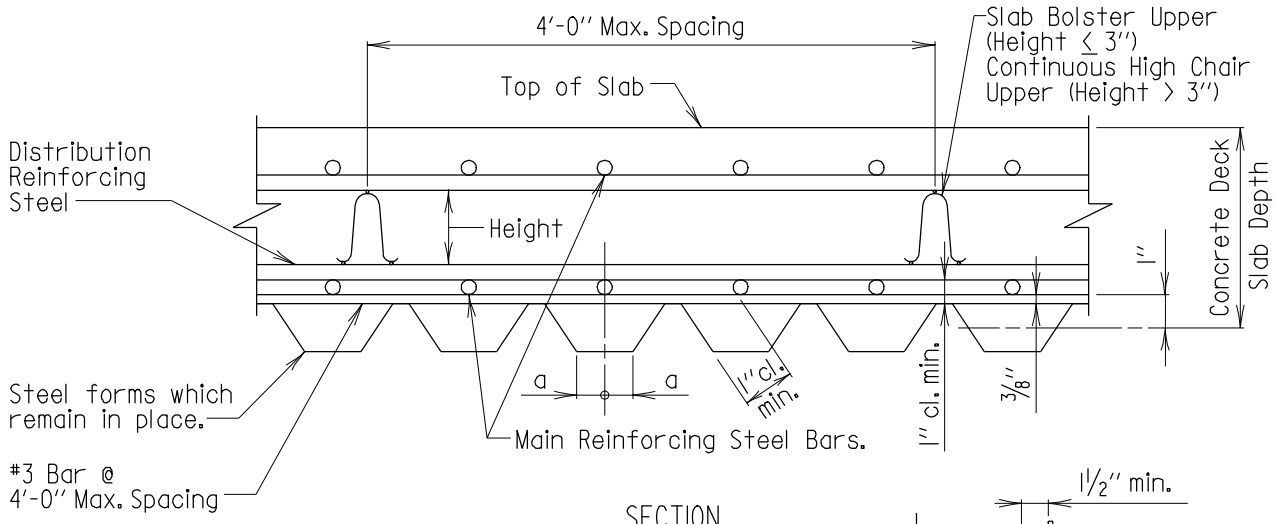
42" F-SHAPE MEDIAN BARRIER FOR BRIDGE WITHOUT LONGITUDINAL JOINT

STANDARD NO. BR-SS(6.03)-03-28 SHEET 1 OF 1

SUPER CONCRETE WORK

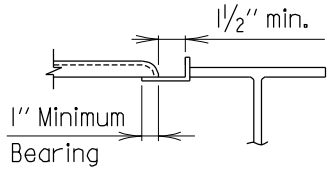
Notes:

1. The Contractor has the option of substituting the Ancel Frame Scaffolding System for steel forms which remain in place with the following exceptions:
   a) Bridges over existing highways.
   b) Bridges over high speed or electrified railroads.
2. Ancel Frames may never be used on any fracture critical member.
3. The Contractor has the option of substituting the Ancel Frame Scaffolding System for conventional overhang brackets on fascia stringers with the following exceptions:
   a) Bridges over new or existing highways.
   b) Bridges over navigable waterways with underclearance less than 30 feet.
4. In any instance where studs are allowed they shall remain in place.



SECTION

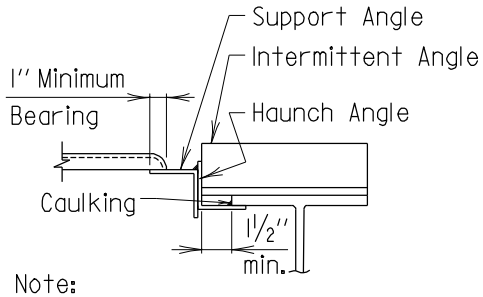
Scale: None



WHERE FORM IS BELOW BOTTOM OF FLANGE AND THERE ARE NO SHEAR CONNECTORS

Notes:

1. Permanent steel deck forms and supports shall conform to 909.11. Design Span shall be the clear distance between beam and/or girder flanges less two (2) inches.
2. No welding of these forms to parts carrying tension will be permitted. These forms shall be vertically adjusted to attain line and grade as required.
3. Any permanently exposed form metal where the galvanized coating has been damaged shall be thoroughly cleaned, wire brushed and painted with two coats of zinc-oxide dust primer, Federal Specification TT-P-641d, Type II, no color added, to the satisfaction of the engineer. Minor heat discoloration in areas of welds need not be touched up.
4. Contractor has option of using this detail or that shown on 2 of 2, except for bridge decks with curved stringers or bridge with a flared rebar pattern. For bridge with curved stringers or bridge with a flared rebar pattern only the detail shown on sheet 2 of 2 can be used.
5. Where shear connectors are utilized, normal manufacturers detailing may be utilized at stringer flange.
6. Supports for rebar shall be provided by Contractor.



Note:
Alternate attachments will be considered, that provide the 1½" concrete encasement of top flange.

WHERE FORM IS ABOVE BOTTOM OF FLANGE AND THERE ARE NO SHEAR CONNECTORS

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 9/8/76

REVISIONS	
SHA	FHWA
5-21-85	11-29-85
8-30-90	·
1-4-94	·
1-22-01	·

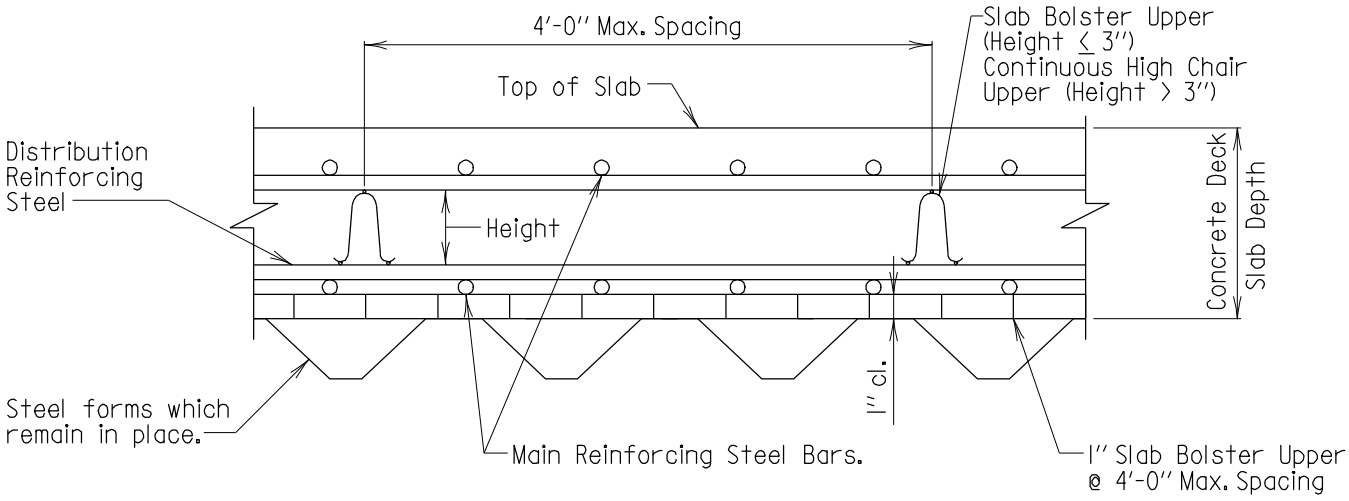
FHWA APPROVAL	
DATE: 11-9-76	

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

STEEL FORMS WHICH REMAIN IN PLACE FOR CONCRETE SLABS ON STEEL STRINGERS RE-BARS ALIGNED WITH TROUGH

STANDARD NO. BR-SS(6.06)-75-29 SHEET 1 OF 2

SUPER-CONCRETE WORK



SECTION

Scale: None

Notes:

1. For notes see sheet 1 of 2.
2. This detail is acceptable only on structures where the General Notes under "Loading" states "and 15 pounds per square foot for use of steel bridge deck forms which remain in place."
3. Supports for rebar shall be provided by Contractor.

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 1/29/80

REVISIONS	
SHA	FHWA
8-30-90	·
11-18-04	·
·	·
·	·

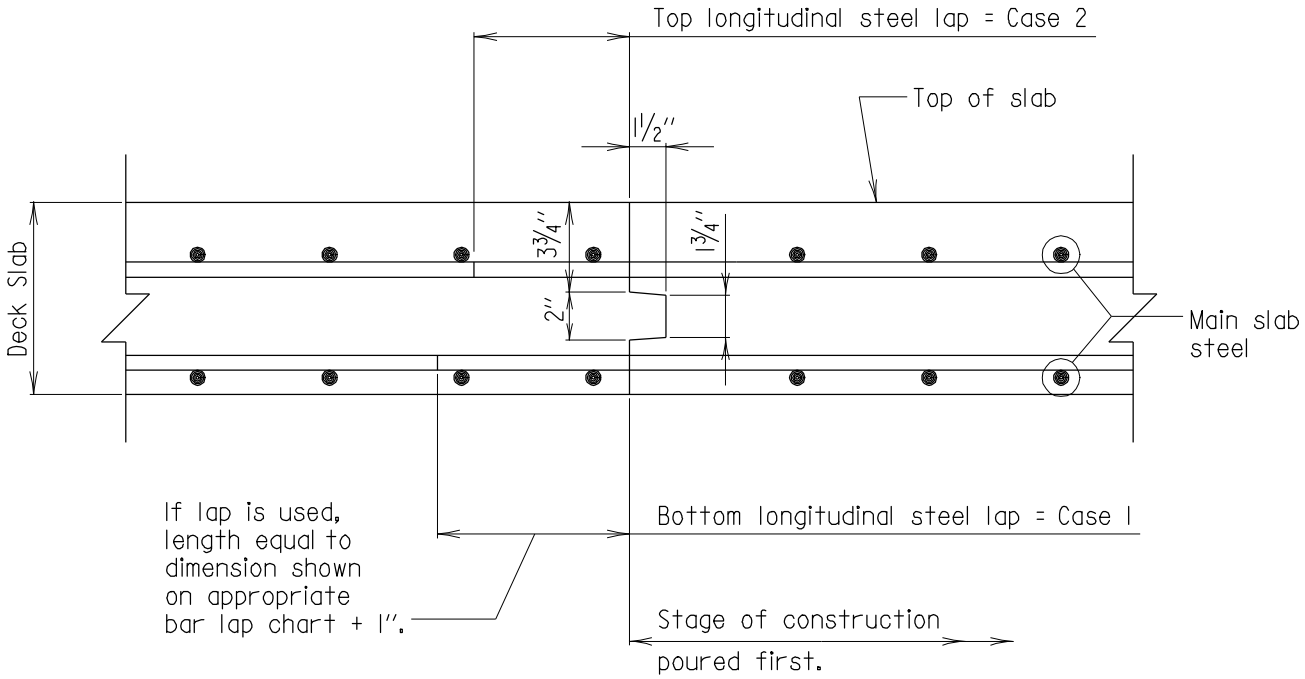
FHWA APPROVAL		
DATE: 6-20-80	·	·

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

STEEL FORMS WHICH REMAIN IN PLACE FOR CONCRETE SLABS ON STEEL STRINGERS RE-BARS INDEPENDENT WITH TROUGH

STANDARD NO. BR-SS(6.06)-75-29 SHEET 2 OF 2

SUPER-CONCRETE WORK



SECTION

Scale: 1½" = 1'-0"

Notes:

1. Reinforcing steel to be continuous thru joint.
2. Entire face of construction joint shall be coated with an approved epoxy bonding compound.
3. All dimensions shown are actual dimensions.
4. See lap charts for length of splices.

APPROVAL
C.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 1/6/78

REVISIONS	
SHA	FHWA
12-12-83	2-23-84
7-5-84	11-8-84
12-2-87	6-8-90
3-20-95	·

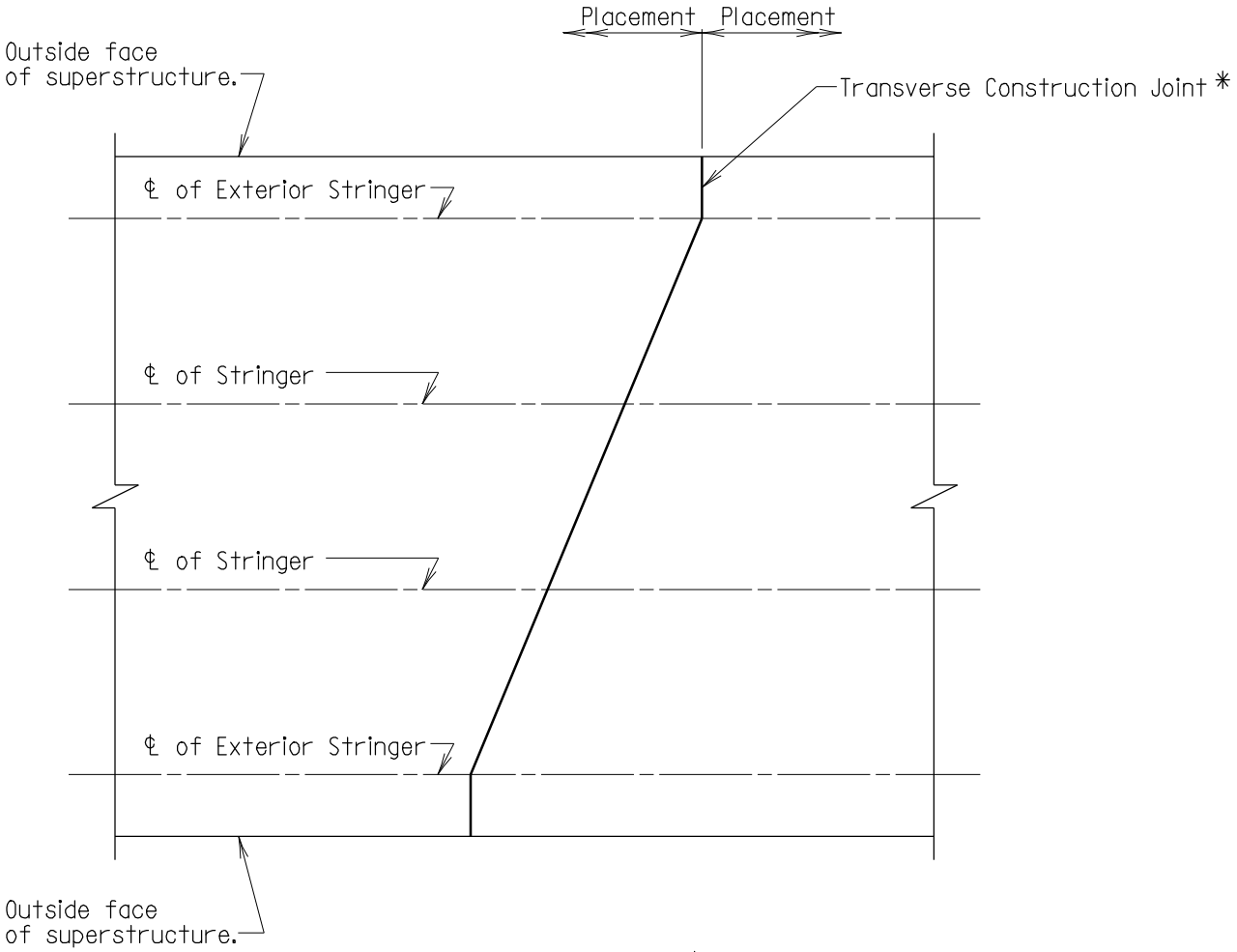
FHWA APPROVAL
DATE: 1-31-78

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

BRIDGE DECK SLAB DETAIL AT TRANSVERSE CONSTRUCTION JOINT

STANDARD NO. BR-SS(6.07)-77-68 SHEET 1 OF 1

SUPER CONCRETE WORK



PLAN

Scale: None

*Transverse construction joints to be placed parallel to center line bearing for piers and abutments. If substructure units are not parallel then transverse construction joints shall be parallel to the closest substructure unit center line of bearing.

Transverse construction joints to be perpendicular to the outside face of superstructure for the portion of the deck outside of the exterior stringer.

Note:
For detail of construction joint see Standard No. BR-SS(6.07)-77-68.

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 4/12/78

REVISIONS	
SHA	FHWA
12-15-80	12-15-80
9-13-94	·
·	·
·	·

FHWA APPROVAL
DATE: 10-17-78

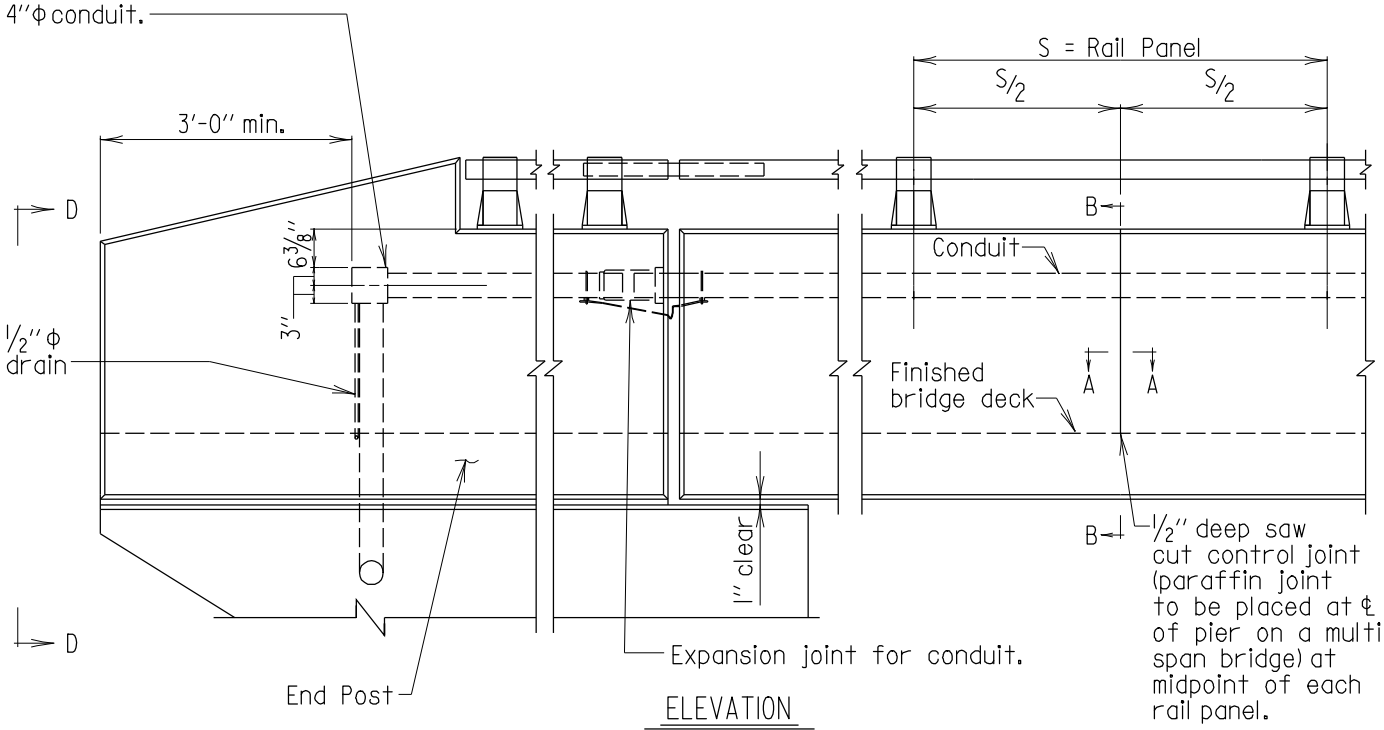
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

LAYOUT OF TRANSVERSE JOINT FOR SKEWED BRIDGE DECK

STANDARD NO. BR-SS(6.08)-78-69 SHEET 1 OF 1

SUPER-CONCRETE WORK

Note: Details shown are for single rail; double rail and fencing details are similar. On bridges with no fencing or railing see General Plan and Elevation for parapet control joint spacing.



ELEVATION

Scale: 3/8" = 1'-0"

Note: For Section A-A & B-B see sheets 2, 3 & 4 of 4. For View D-D see sheets 2 & 3 of 4.

Notes:

1. The conduit and junction box are to be placed only when indicated in the Superstructure "Typical Section." If ℄ to ℄ of end junction boxes exceed 200', then additional junction boxes shall be placed in parapet, between control joints, so that the maximum distance between boxes is 200'. Junction boxes for light standards, may be utilized. All junction boxes to have 1/2"ϕ drain at drain at low point of box.
2. Conduit may be either PVC or galvanized pipe.

APPROVAL	
E S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL. DATE: 4/13/78	
REVISIONS	
SHA	FHWA
9-26-96	·
6-1-05	·
1-9-08	·
4-16-08	·

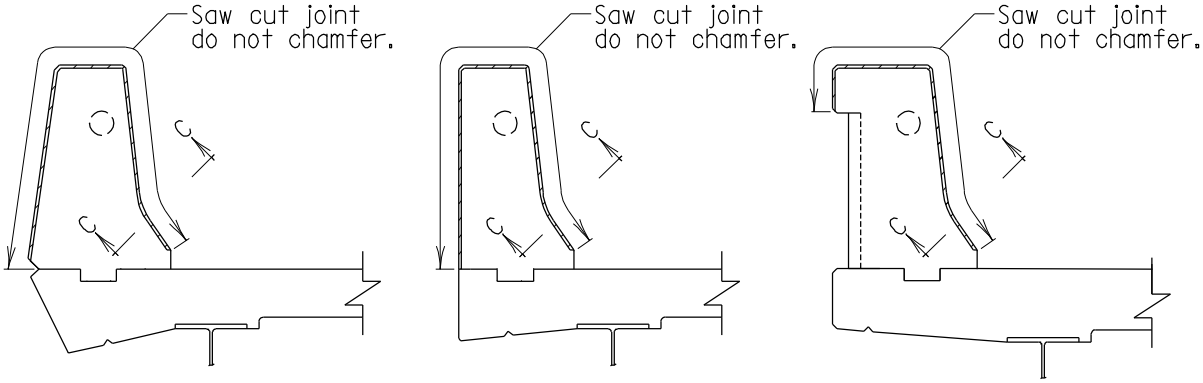
FHWA APPROVAL	
DATE: 10-17-78	

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

PARAPET CONTROL JOINT AND SINGLE CONDUIT PLACEMENT WITH 34" F-SHAPE PARAPET AND PARAPET WITH SIDEWALK

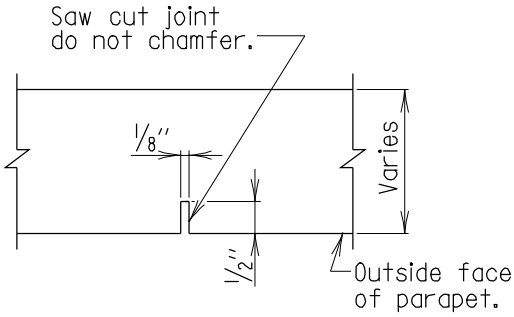
STANDARD NO. BR-SS(6.09)-05-70A SHEET 1 OF 4

SUPER-CONCRETE WORK



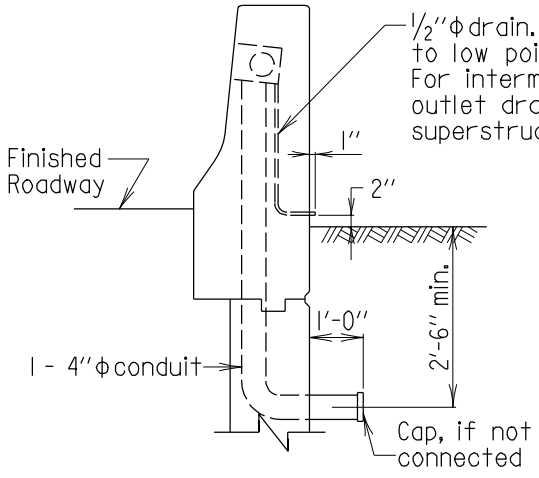
SECTION B-B

Scale: 3/8" = 1-0"



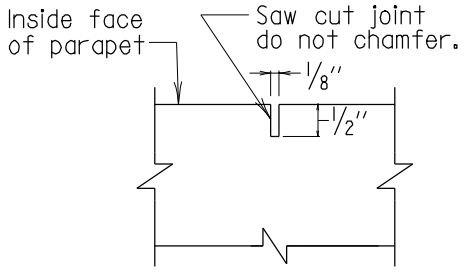
SECTION A-A

Scale: None



VIEW D-D - F-SHAPE PARAPET

Scale: 3/8" = 1'-0"



SECTION C-C

Scale: None

Notes:
1. Place saw cut joint at center of every rail panel.
2. Parapet is placed continuously.
3. Saw cut control joint to be sawed same day as concrete is poured.
4. Fencing and railing not shown.

APPROVAL
E S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 2/9/81

REVISIONS	
SHA	FHWA
10-30-92	·
12-1-93	·
1-22-01	·
6-1-05	·

FHWA APPROVAL
DATE: 3-7-81

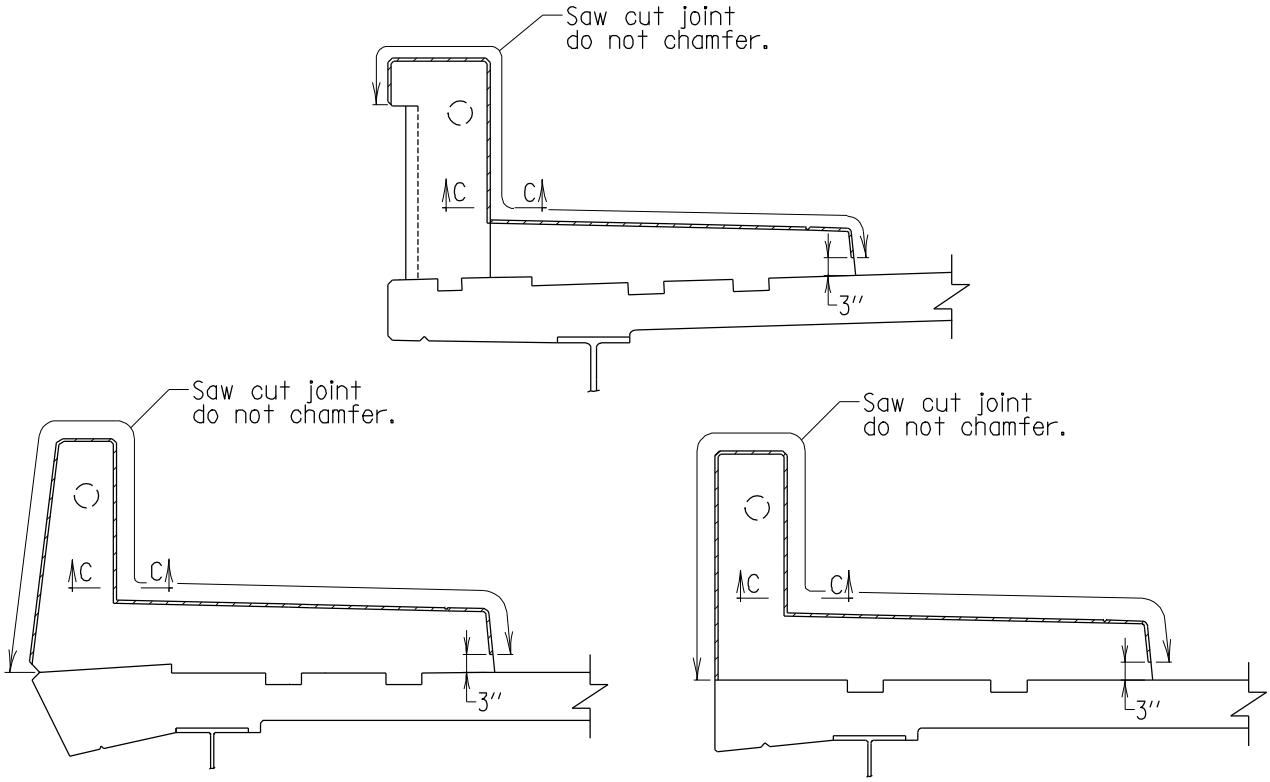
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

PARAPET CONTROL JOINT AND SINGLE CONDUIT PLACEMENT WITH 34" F-SHAPE PARAPET AND PARAPET WITH SIDEWALK

STANDARD NO. BR-SS(6.09)-05-70A

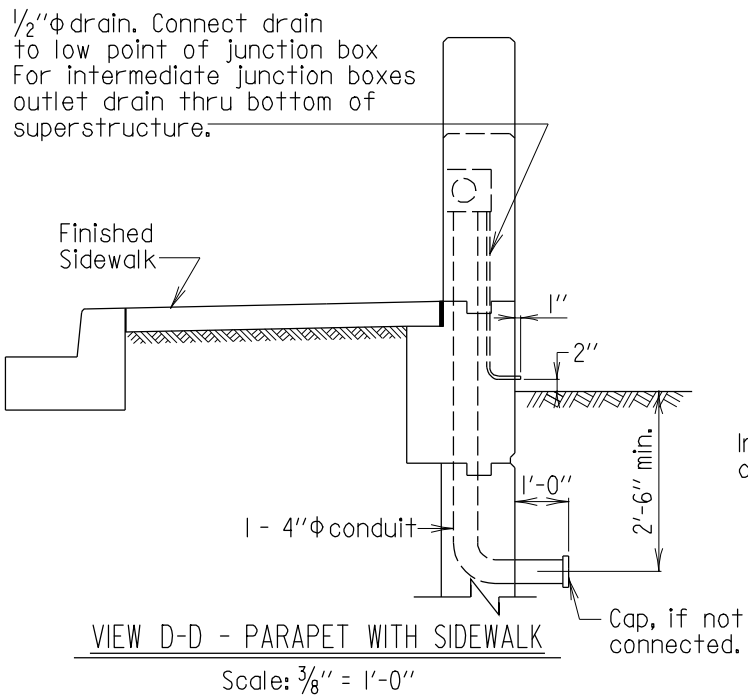
SHEET 2 OF 4

SUPER-CONCRETE WORK



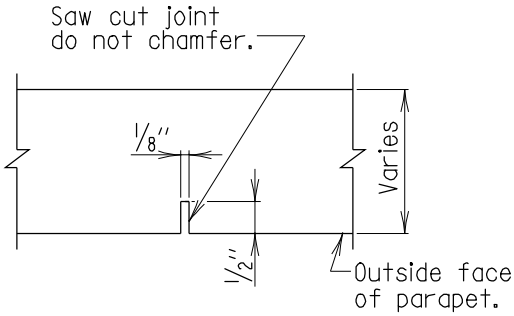
SECTION B-B

Scale: 3/8'' = 1-0''



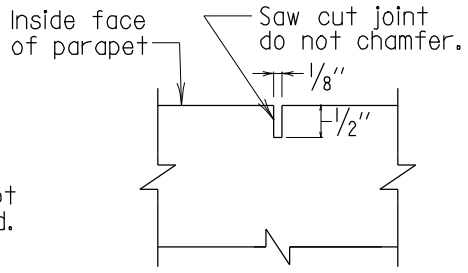
VIEW D-D - PARAPET WITH SIDEWALK

Scale: 3/8'' = 1'-0''



SECTION A-A

Scale: None



SECTION C-C

Scale: None

Notes:
1. Place saw cut joint at center of every rail panel.
2. Parapet is placed continuously.
3. Saw cut control joint to be sawed same day as concrete is poured.
4. Fencing and railing not shown.

APPROVAL
C.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 7/12/89

REVISIONS	
SHA	FHWA
10-30-92	·
12-1-93	·
6-1-05	·
·	·

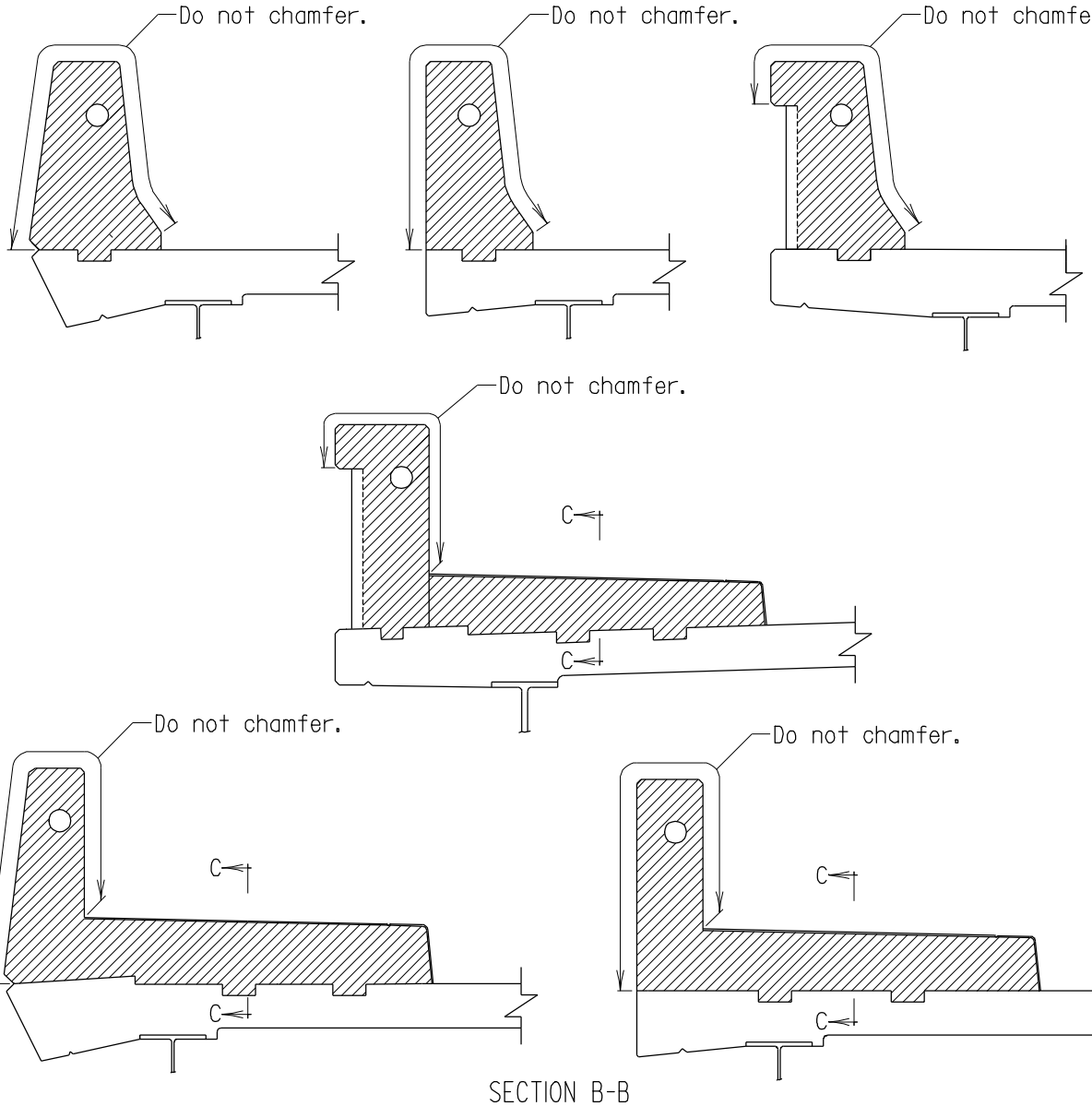
FHWA APPROVAL
DATE: .

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

PARAPET CONTROL JOINT AND SINGLE CONDUIT PLACEMENT WITH 34'' F-SHAPE PARAPET AND PARAPET WITH SIDEWALK

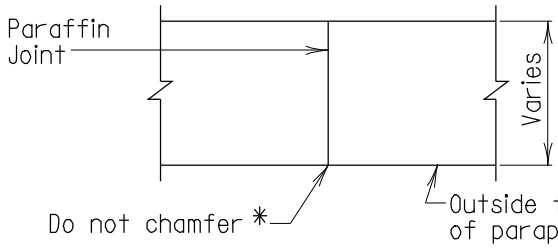
STANDARD NO. BR-SS(6.09)-05-70A SHEET 3 OF 4

SUPER-CONCRETE WORK



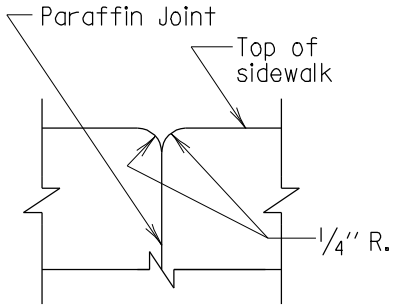
SECTION B-B

Scale: 3/8" = 1-0"



SECTION A-A

Scale: None



SECTION C-C

Scale: Full

*In order to insure a smooth and acceptable surface, 420.03.11 (Construction Joints) will be strictly adhered to.

Notes:

1. Place vertical paraffin joint, shown hatched, at centerline of pier on multi span bridges.
2. Joints shall be formed by placing alternate sections.
3. The placement of adjacent sections shall have a 40 hour delay between placements.
4. Railing and fencing not shown.

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 12/1/93

REVISIONS	
SHA	FHWA
12-1-93	·
6-1-05	·
·	·
·	·

FHWA APPROVAL		
DATE: ·	·	·

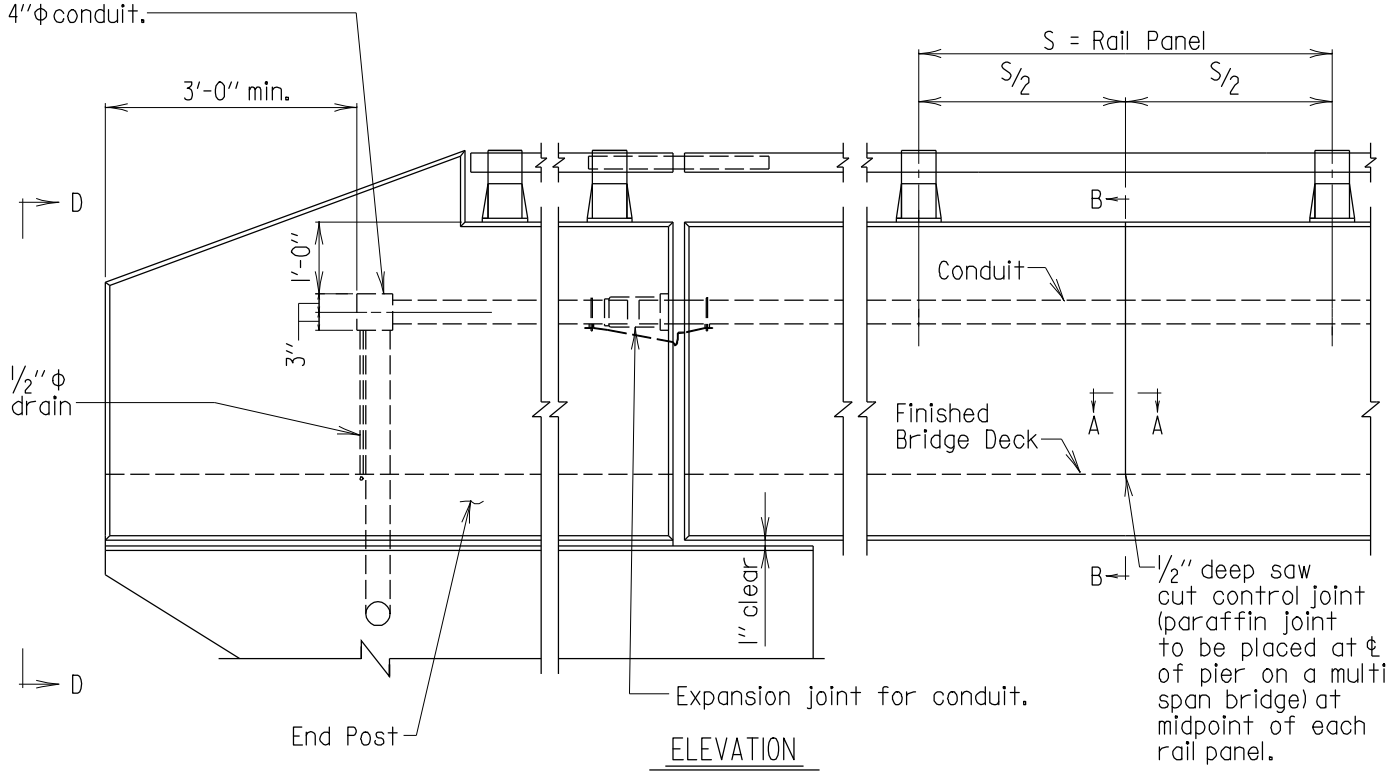
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

PARAPET CONTROL JOINT AND SINGLE CONDUIT PLACEMENT WITH 34" F-SHAPE PARAPET AND PARAPET WITH SIDEWALK

STANDARD NO. BR-SS(6.09)-05-70A SHEET 4 OF 4

SUPER-CONCRETE WORK

Note: Details shown are for single rail; double rail and fencing details are similar. On bridges with no fencing or railing see General Plan and Elevation for parapet control joint spacing.



ELEVATION

Scale: 3/8" = 1'-0"

Note: For Section A-A and B-B see sheets 2 & 3 of 3. For View D-D see sheet 2 of 3.

Notes:

1. The conduit and junction box are to be placed only when indicated in the Superstructure "Typical Section." If ℄ to ℄ of end junction boxes exceed 200', then additional junction boxes shall be placed in parapet, between control joints, so that the maximum distance between boxes is 200'. Junction boxes for light standards, may be utilized. All junction boxes to have 1/2"ϕ drain at drain at low point of box.
2. Conduit may be either PVC or galvanized pipe.

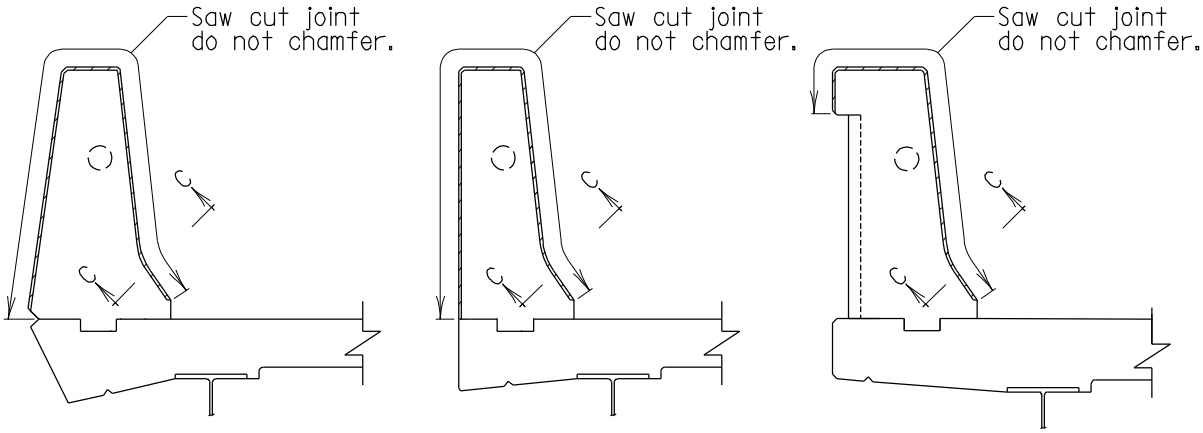
APPROVAL		
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL. DATE: 6/1/05		
REVISIONS		
SHA	FHWA	
1-9-08	·	
4-18-08	·	
FHWA APPROVAL	·	·
DATE: .	·	·

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

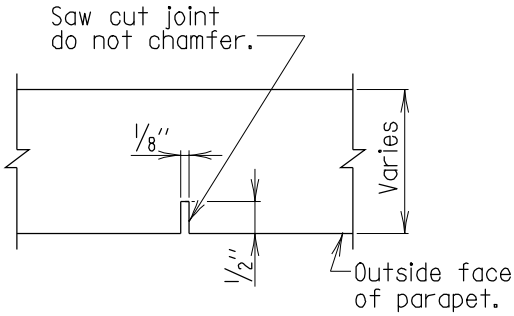
PARAPET CONTROL JOINT AND SINGLE CONDUIT PLACEMENT WITH 42" F-SHAPE PARAPET

STANDARD NO. BR-SS(6.09)-05-70B SHEET 1 OF 3

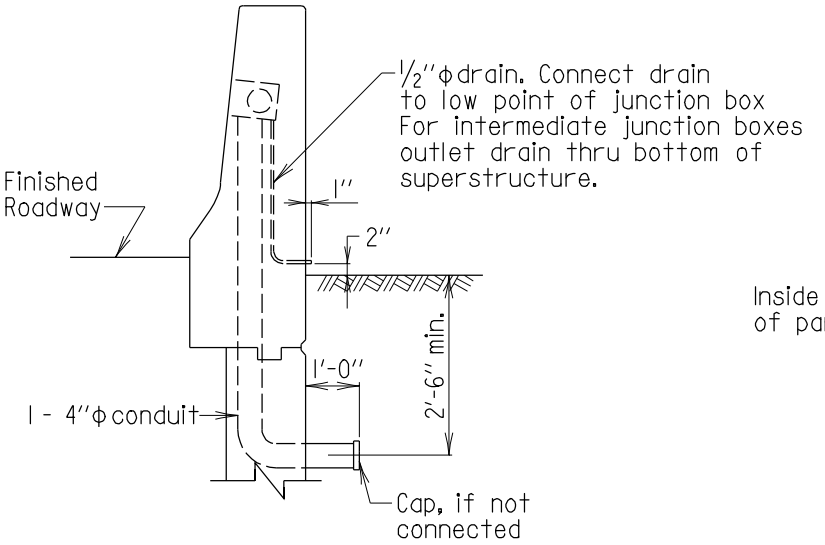
SUPER-CONCRETE WORK



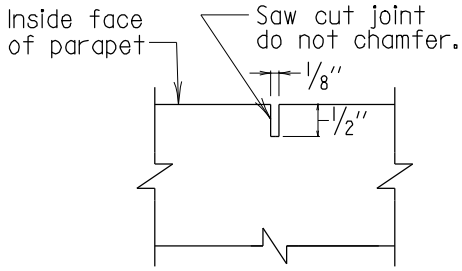
SECTION B-B
Scale: 3/8" = 1-0"



SECTION A-A
Scale: None



VIEW D-D
Scale: 3/8" = 1'-0"



SECTION C-C
Scale: None

Notes:
1. Place saw cut joint at center of every rail panel.
2. Parapet is placed continuously.
3. Saw cut control joint to be sawed same day as concrete is poured.
4. Fencing and railing not shown.

APPROVAL
C S Friedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA

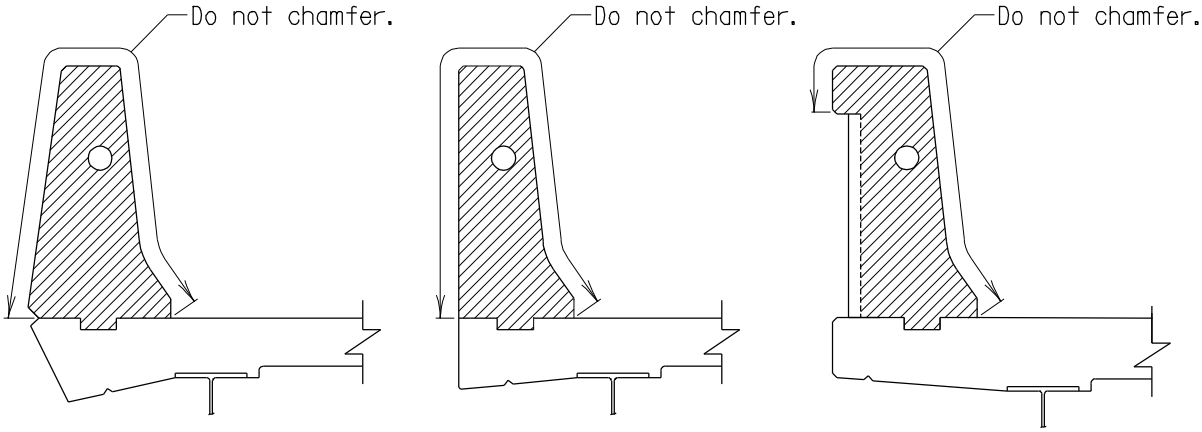
FHWA APPROVAL
DATE:

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

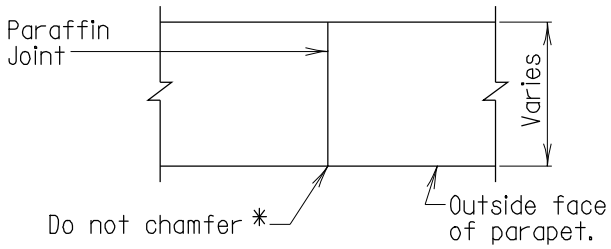
PARAPET CONTROL JOINT AND SINGLE CONDUIT PLACEMENT WITH 42" F-SHAPE PARAPET

STANDARD NO. BR-SS(6.09)-05-70B SHEET 2 OF 3

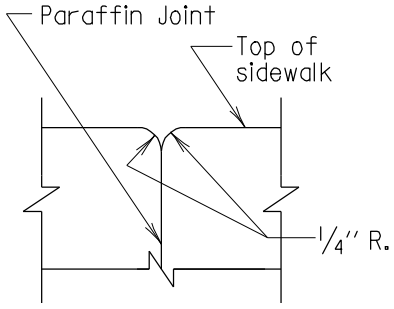
SUPER-CONCRETE WORK



SECTION B-B
Scale: 3/8" = 1-0"



SECTION A-A
Scale: None



SECTION C-C
Scale: Full

*In order to insure a smooth and acceptable surface, 420.03.II (Construction Joints) will be strictly adhered to.

Notes:
1. Place vertical paraffin joint, shown hatched, at centerline of pier on multi span bridges.
2. Joints shall be formed by placing alternate sections.
3. The placement of adjacent sections shall have a 40 hour delay between placements.
4. Railing and fencing not shown.

APPROVAL
E S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA

FHWA APPROVAL
DATE:

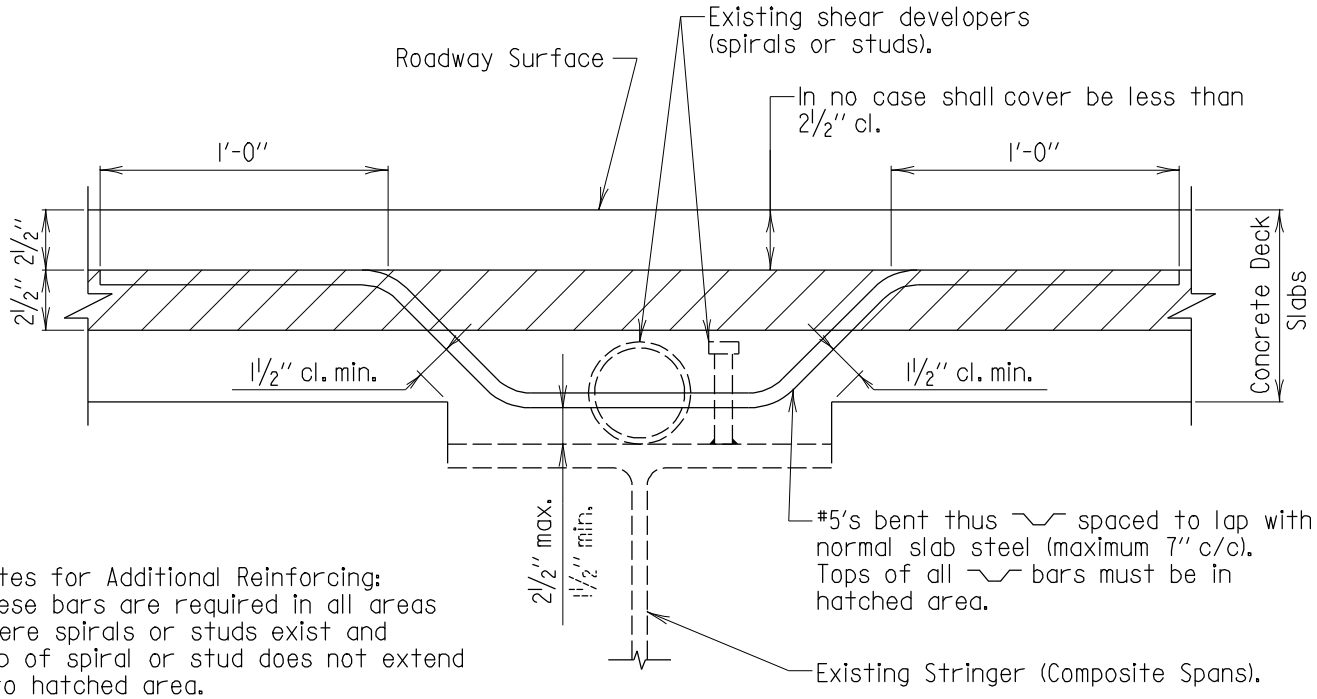
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

PARAPET CONTROL JOINT AND SINGLE CONDUIT PLACEMENT WITH 42" F-SHAPE PARAPET

STANDARD NO. BR-SS(6.09)-05-70B

SHEET 3 OF 3

SUPER-CONCRETE WORK

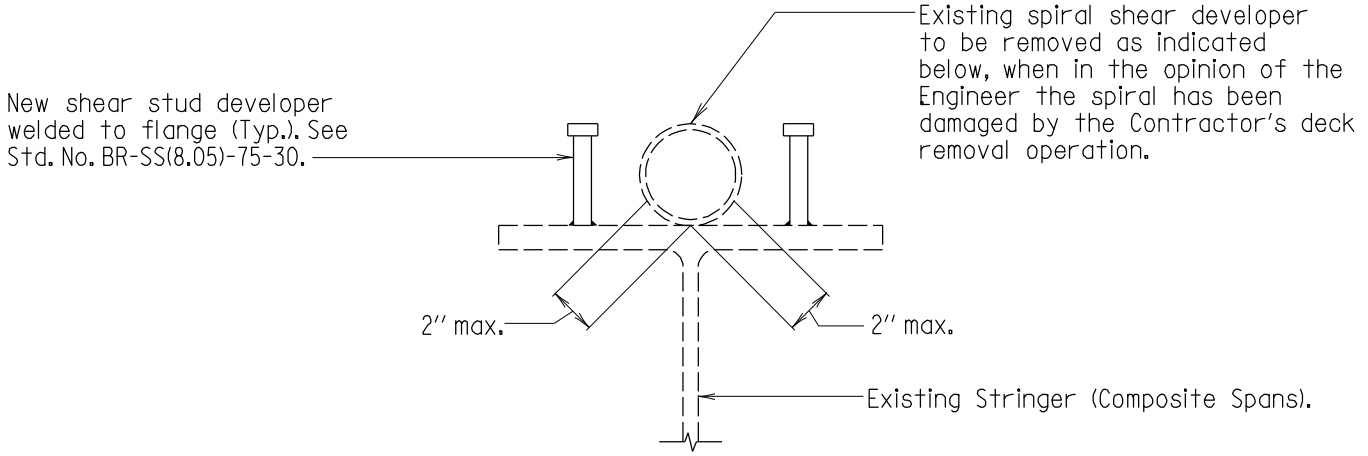


SECTION

Scale: 1½" = 1'-0"

Notes for Additional Reinforcing:

1. These bars are required in all areas where spirals or studs exist and top of spiral or stud does not extend into hatched area.
2. These bars shall be epoxy coated.
3. The cost of these bars will be negotiated if it is found that they are necessary, unless otherwise indicated in the Special Provisions.



SPIRAL REMOVAL

Scale: 1½" = 1'-0"

Notes for Spiral Removal:

1. Contractor shall cut spiral shear developers as close to flange as possible. Burning off spirals from flange will not be allowed.
2. The studs will not be measured for payment. All costs shall be incidental to the concrete removal item.

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 7/26/79

REVISIONS	
SHA	FHWA
12-12-83	2-23-84
10-13-87	12-1-87
10-25-90	·
5-18-93	·

FHWA APPROVAL	
DATE: 12-12-79	

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

DETAIL OF ADDITIONAL REINFORCEMENT AT EXISTING SHEAR DEVELOPERS AND SPIRAL REMOVAL

STANDARD NO. BR-SS(6.10)-79-76 SHEET 1 OF 1

SUPER CONCRETE WORK

NOTES

Design:

1. Latest A.A.S.H.T.O. Standard Specifications for Highway Bridges.

2. f'_c = 4500 p.s.i., f_c = 0.3 f'_c = 1350 p.s.i., f_s = 24,000 p.s.i.

3. Design includes provision for 2" future wearing surface.

General:

1. Transverse bars shall be placed normal to ℄ stringers, except in case of curved stringers. When stringers are curved transverse bars shall be placed radially.

2. When skew angles are greater than 60° then Contractor may use either Reinforcing Steel Pattern No. 1 or No. 2 throughout bridge.

3. When the effective span is less than 5'-9", all bars shall be straight top and bottom. No truss bars are to be used.

APPROVAL
E. S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 12/4/79

REVISIONS	
SHA	FHWA
10-4-82	6-8-90
3-1-84	6-8-90
11-18-87	6-8-90
10-12-90	

FHWA APPROVAL
DATE: 6-8-90

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

BRIDGE DECK SLAB
GENERAL NOTES AND BAR SPACING

STANDARD NO. BR-SS(6.11)-79-90 SHEET 1 OF 2

SUPER-CONCRETE WORK

NOTES

Design:

1. Latest AASHTOLRFD Bridge Design Specifications.

2. f'_c = 4500 p.s.i., f_c = 0.3 f'_c=1350 p.s.i., f_s = 24,000 p.s.i., f_y=60,000 p.s.i.

3. Design includes provision for 2'' future wearing surface.

General:

1. Transverse bars shall be placed normal to ℄ stringers, except in case of curved stringers. When stringers are curved transverse bars shall be placed radially.

2. When skew angles are greater than 60° then Contractor may use either Reinforcing Steel Pattern No. 1 or No. 2 throughout bridge.

3. When the effective span is less than 5'-9'', all bars shall be straight top and bottom. No truss bars are to be used.

4. Typical sections shall include a minimum of three stringers and have a width of not less than 14.0' between centerlines of exterior stringers.

5. Overhangs shall be at least 21'' but shall not exceed the smaller of 0.625 times the stringer spacing and 6.0'.

6. Reinforcing in the slab overhangs shall be designed in accordance with AASHTO.

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 12/4/79

REVISIONS	
SHA	FHWA
3-1-84	6-8-90
11-18-87	6-8-90
10-12-90	·
10-9-07	·

FHWA APPROVAL
DATE: 6-8-90

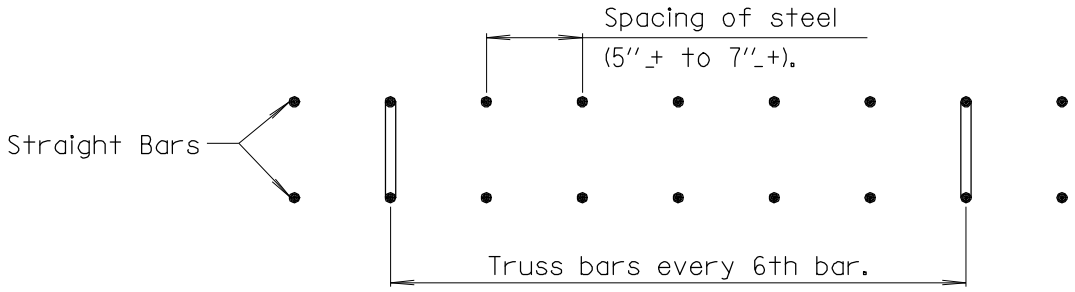
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

VERIFIED 10-9-2007 LRFD

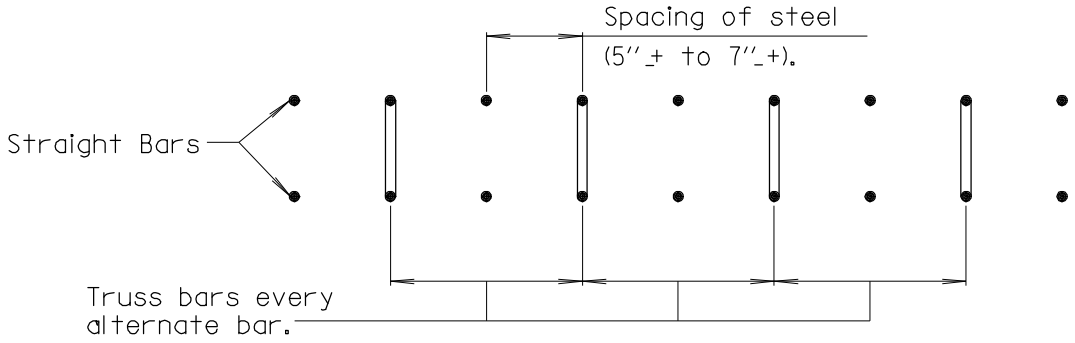
BRIDGE DECK SLAB
GENERAL NOTES AND BAR SPACING

STANDARD NO. BR-SS(6.11)-79-90(L) SHEET 1 OF 2

SUPER-CONCRETE WORK

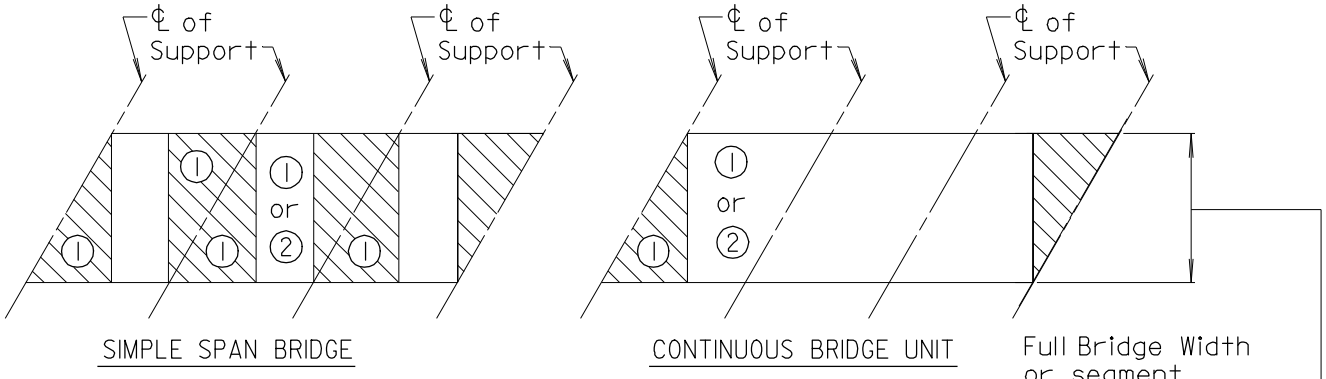


REINFORCING STEEL PATTERN NO. 1



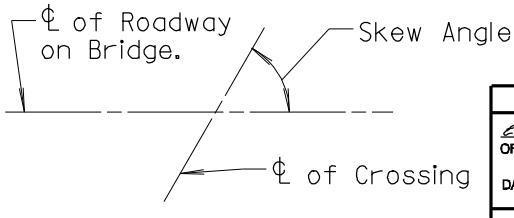
REINFORCING STEEL PATTERN NO.2

1. The Contractor has the option of using Reinforcing steel Pattern No.1 or No.2 in the unhatched portions of the decks shown below.
2. The Contractor shall use only Reinforcing Steel Pattern No.1 in the hatched portions of the decks shown below.



TRANSVERSE BAR SPACING FOR SPANS WITH SKEW ANGLES LESS THAN 60°

Scale: 1"=1'-0"



SKEW ANGLE

Scale: None

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 12/4/79

REVISIONS	
SHA	FHWA
10-4-82	6-8-90
3-1-84	6-8-90
11-18-87	6-8-90
9-25-89	6-8-90

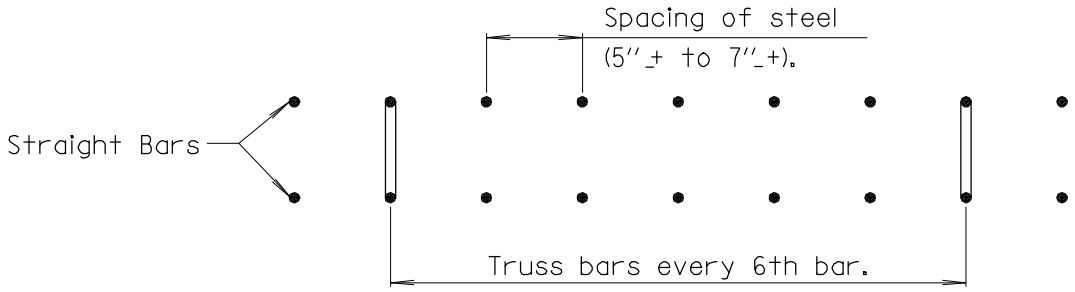
FHWA APPROVAL
DATE: 6-8-90

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

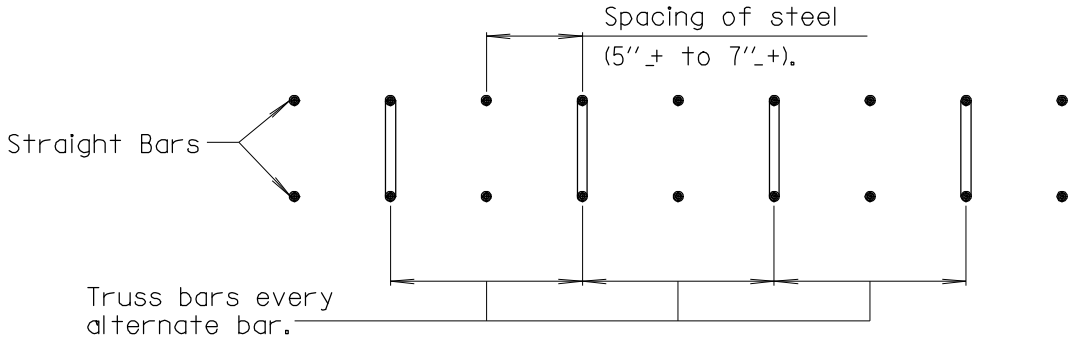
BRIDGE DECK SLAB
GENERAL NOTES AND BAR SPACING

STANDARD NO. BR-SS(6.11)-79-90 SHEET 2 OF 2

SUPER-CONCRETE WORK

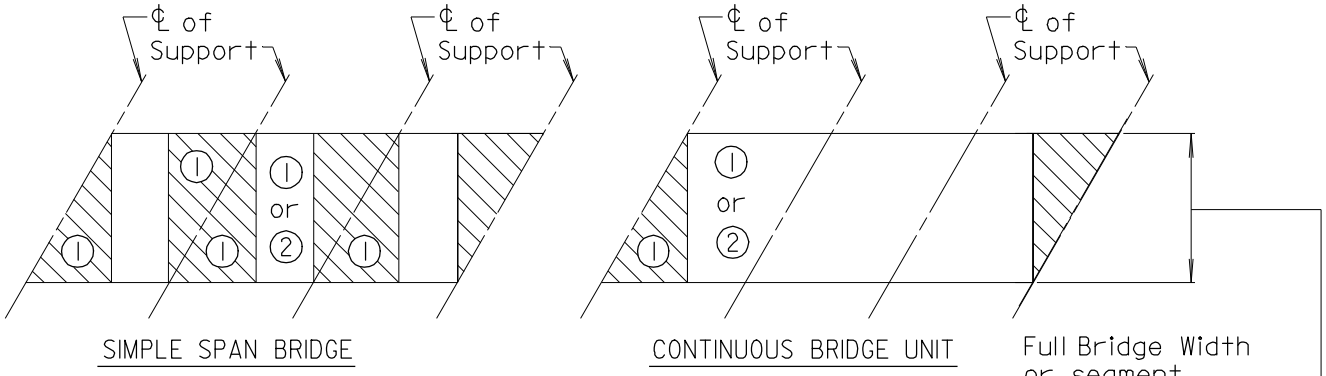


REINFORCING STEEL PATTERN NO. 1



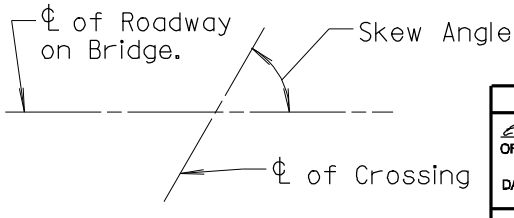
REINFORCING STEEL PATTERN NO.2

1. The Contractor has the option of using Reinforcing steel Pattern No.1 or No.2 in the unhatched portions of the decks shown below.
2. The Contractor shall use only Reinforcing Steel Pattern No.1 in the hatched portions of the decks shown below.



TRANSVERSE BAR SPACING FOR SPANS WITH SKEW ANGLES LESS THAN 60°

Scale: 1"=1'-0"



SKEW ANGLE

Scale: None

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 12/4/79

REVISIONS	
SHA	FHWA
3-1-84	6-8-90
11-18-87	6-8-90
9-25-89	6-8-90
10-9-07	·

FHWA APPROVAL
DATE: 6-8-90

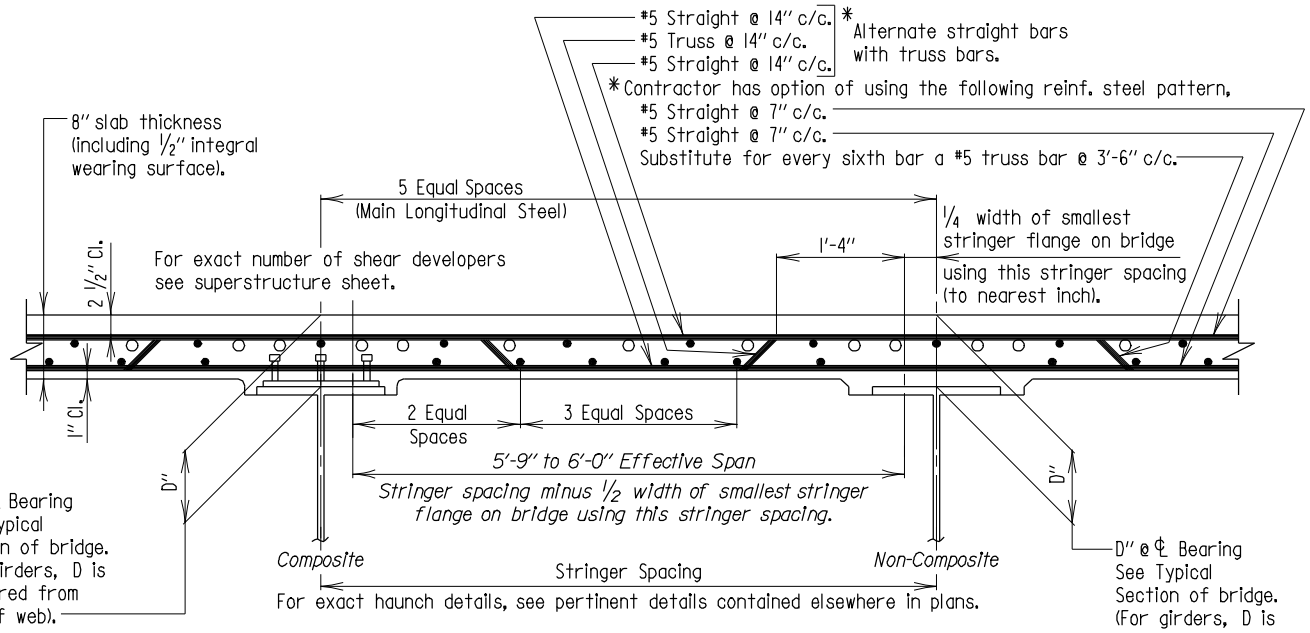
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

VERIFIED 10-9-2007 LRFD

BRIDGE DECK SLAB
GENERAL NOTES AND BAR SPACING

STANDARD NO. BR-SS(6.11)-79-90(L) SHEET 2 OF 2

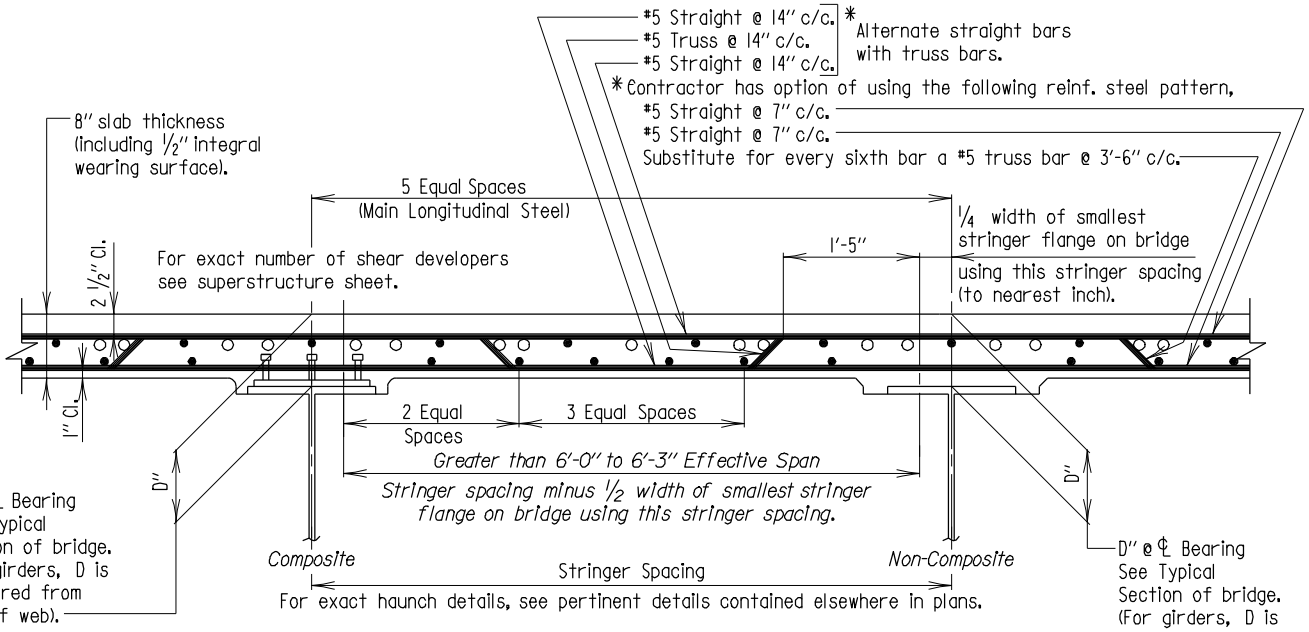
SUPER-CONCRETE WORK



HS20 TYPE I SLAB
5'-9" TO 6'-0" EFFECTIVE SPAN

Scale: 1/2"=1'-0"

Note:
For effective spans less than 5'-9" see Note 3 on Std. No. BR-SS(6.11)-79-90.



HS20 TYPE II SLAB
GREATER THAN 6'-0" TO 6'-3" EFFECTIVE SPAN

Scale: 1/2"=1'-0"

Note:
Slanted lettering indicates notes "For Office Use Only".

Note:
1. All steel sizes and spacing based on ASTM A-615, Grade 60 (fs=24,000 p.s.i.).
2. Transverse bars to be placed normal to center line of stringers. (For curved girder see BR-SS(6.11)-79-90).
3. All longitudinal bars are to be #5's placed as shown except if Note 4 requires and indicates larger bars.
4. On continuous bridges, over piers, additional longitudinal steel is to be added to the top of the slab between normal bars and is indicated thus ○. See Detail No. BR-SS(6.30)-88-195 for the lengths and size of these additional bars.

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 12/4/79

REVISIONS	
SHA	FHWA
1-5-88	6-8-90
9-20-89	6-8-90
3-22-00	·
1-22-01	·

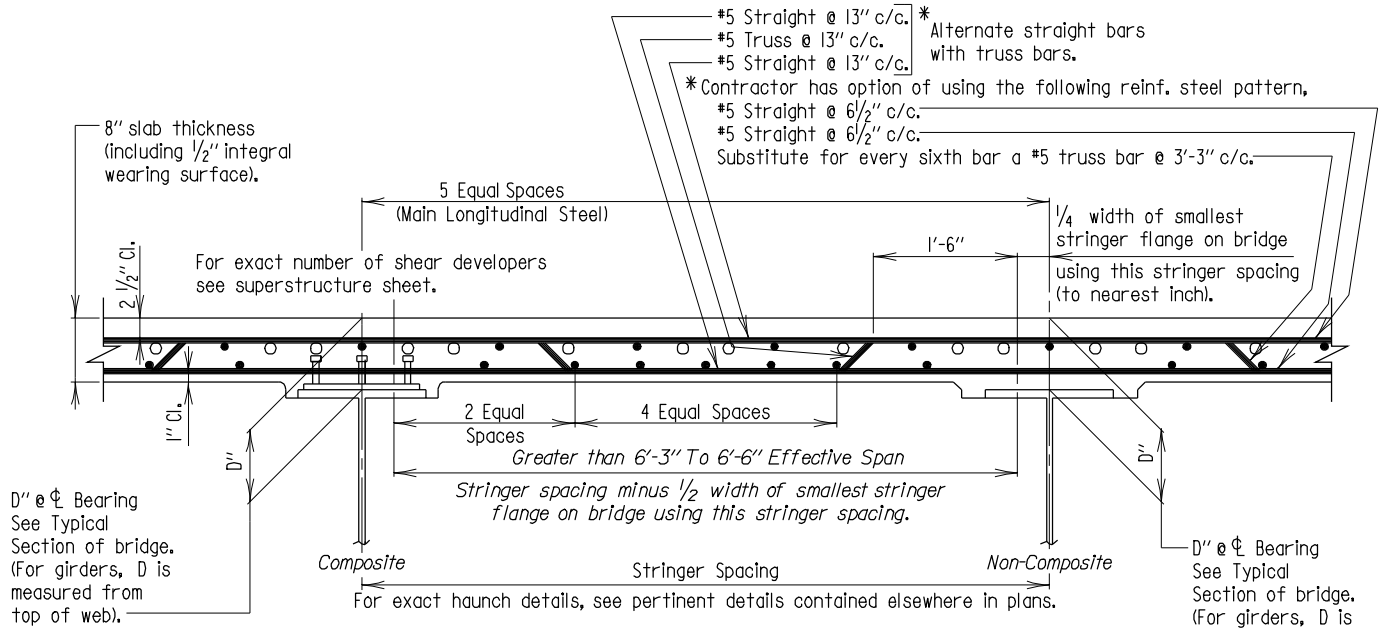
FHWA APPROVAL
DATE: 6-8-90

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

TYPE I AND II BRIDGE DECK SLABS HS20 LOADING

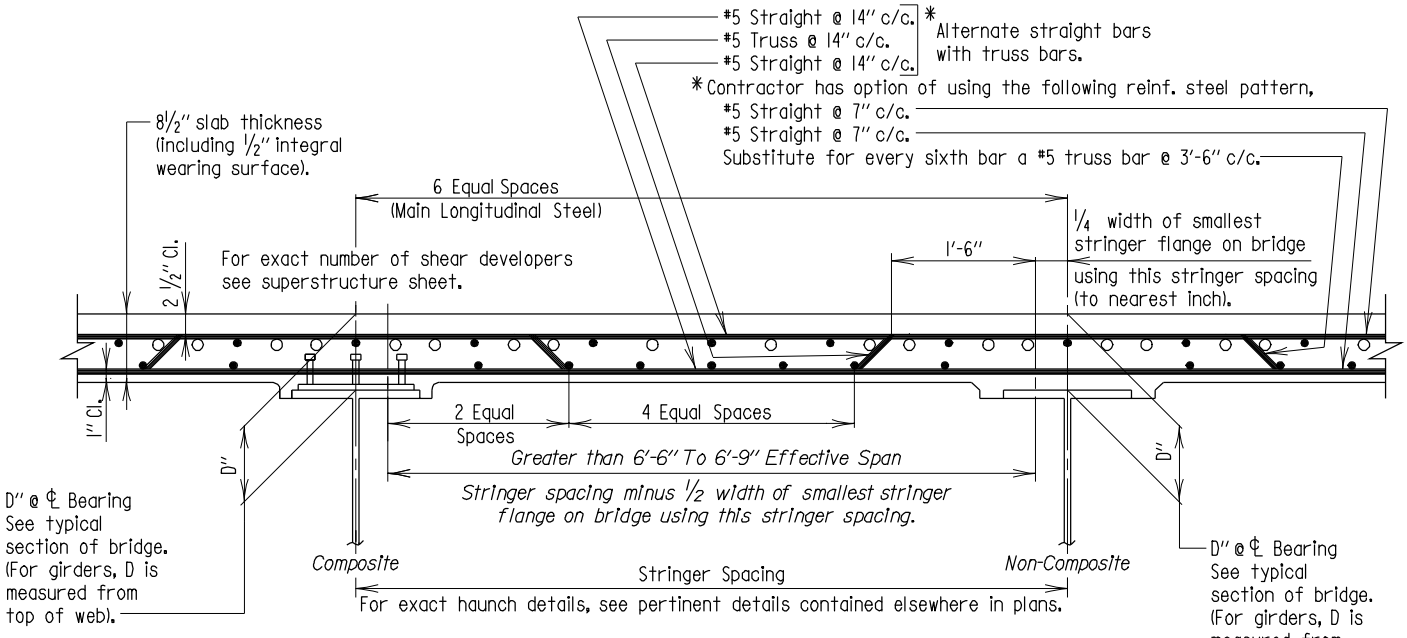
STANDARD NO. BR-SS(6.12)-79-91 **SHEET** 1 **OF** 1

SUPER CONCRETE WORK



HS20 TYPE III SLAB
GREATER THAN 6'-3" TO 6'-6" EFFECTIVE SPAN

Scale: ½"=1'-0"



HS20 TYPE IV SLAB
GREATER THAN 6'-6" TO 6'-9" EFFECTIVE SPAN

Scale: ½"=1'-0"

Note:
Slanted lettering indicates notes "For Office Use Only".

Note:
1. All steel sizes and spacing based on ASTM A-615, Grade 60 (fs=24,000 p.s.i.).
2. Transverse bars to be placed normal to center line of stringers. (For curved girder see BR-SS(6.11)-79-90).
3. All longitudinal bars are to be #5's placed as shown except if Note 4 requires and indicates larger bars.
4. On continuous bridges, over piers, additional longitudinal steel is to be added to the top of the slab between normal bars and is indicated thus ○. See Detail No. BR-SS(6.30)-88-195 for the lengths and size of these additional bars.

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 12/4/79

REVISIONS	
SHA	FHWA
1-5-88	6-8-90
9-20-89	6-8-90
3-22-00	·
1-22-01	·

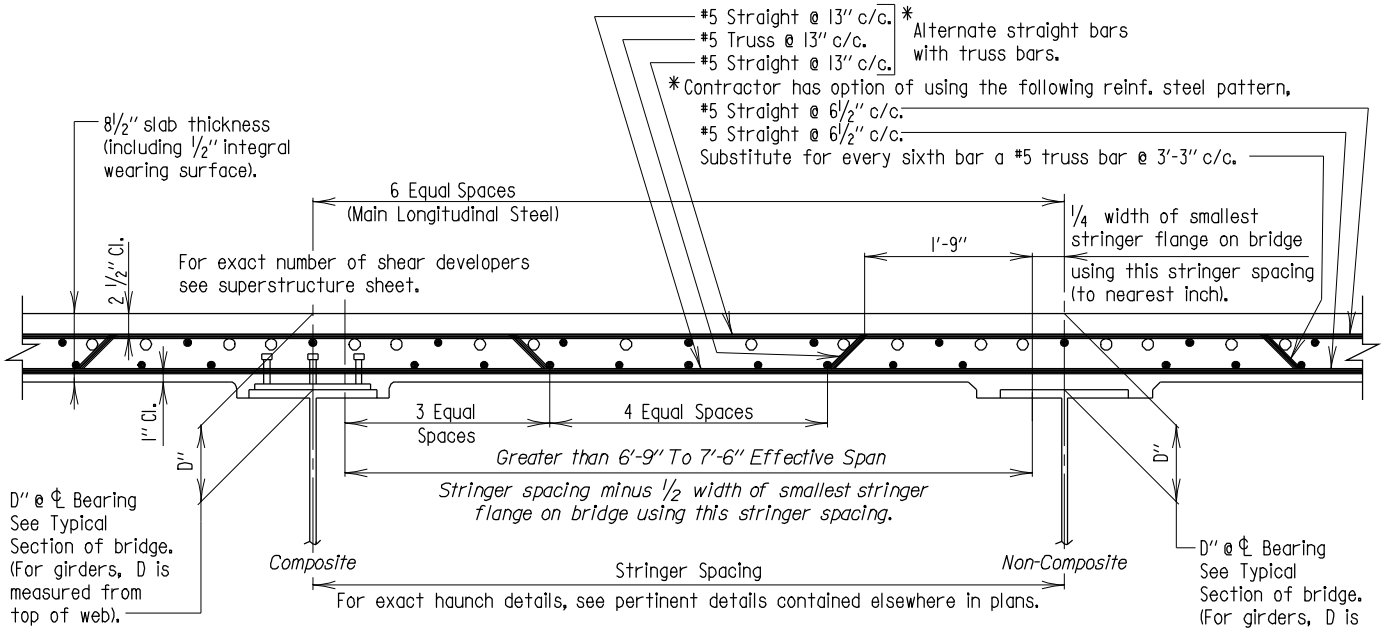
FHWA APPROVAL	
DATE: 6-8-90	

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

TYPE III AND IV BRIDGE DECK SLABS HS20 LOADING

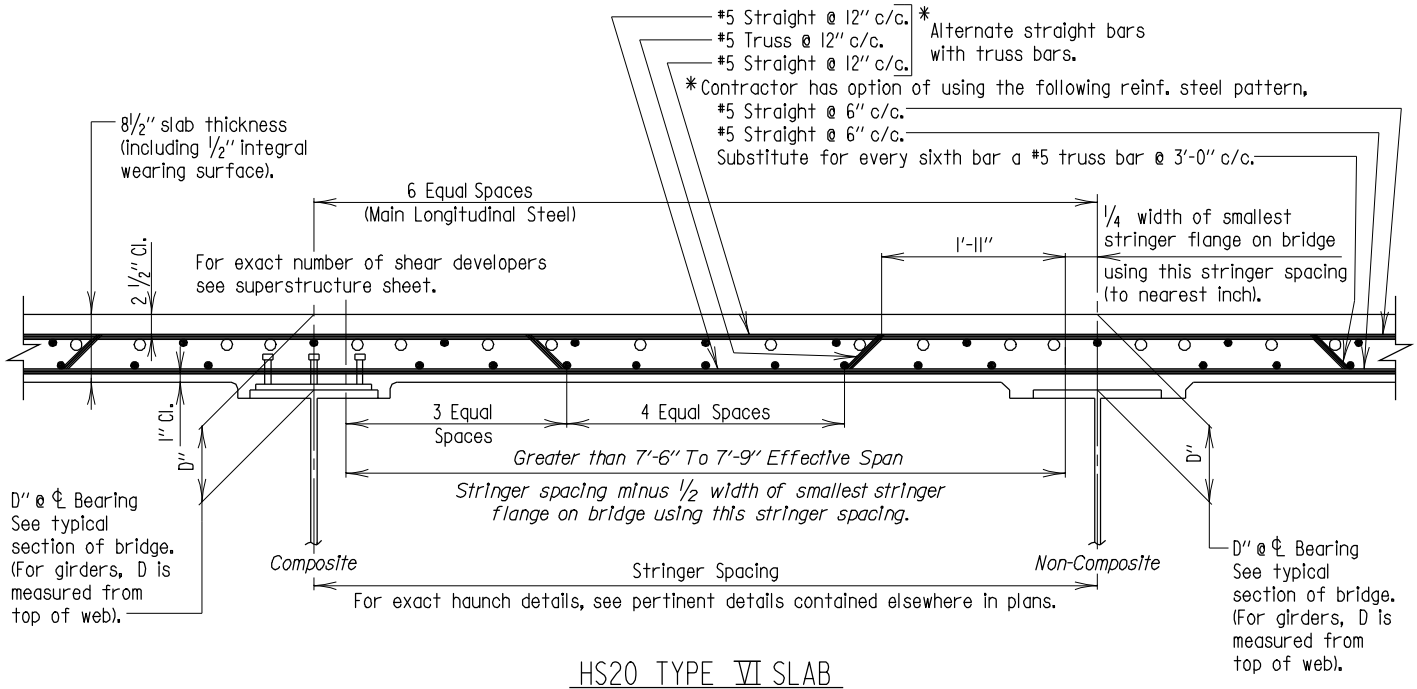
STANDARD NO. BR-SS(6.13)-79-92 SHEET 1 OF 1

SUPER CONCRETE WORK



HS20 TYPE V SLAB
GREATER THAN 6'-9" TO 7'-6" EFFECTIVE SPAN

Scale: ½"=1'-0"



HS20 TYPE VI SLAB
GREATER THAN 7'-6" TO 7'-9" EFFECTIVE SPAN

Scale: ½"=1'-0"

Note:
Slanted lettering indicates notes "For Office Use Only".

Note:
1. All steel sizes and spacing based on ASTM A-615, Grade 60 (fs=24,000 p.s.i.).
2. Transverse bars to be placed normal to center line of stringers. (For curved girder see BR-SS(6.11)-79-90).
3. All longitudinal bars are to be #5's placed as shown except if Note 4 requires and indicates larger bars.
4. On continuous bridges, over piers, additional longitudinal steel is to be added to the top of the slab between normal bars and is indicated thus ○. See Detail No. BR-SS(6.30)-88-195 for the lengths and size of these additional bars.

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 12/4/79

REVISIONS	
SHA	FHWA
1-5-88	6-8-90
9-20-89	6-8-90
3-22-00	·
1-22-01	·

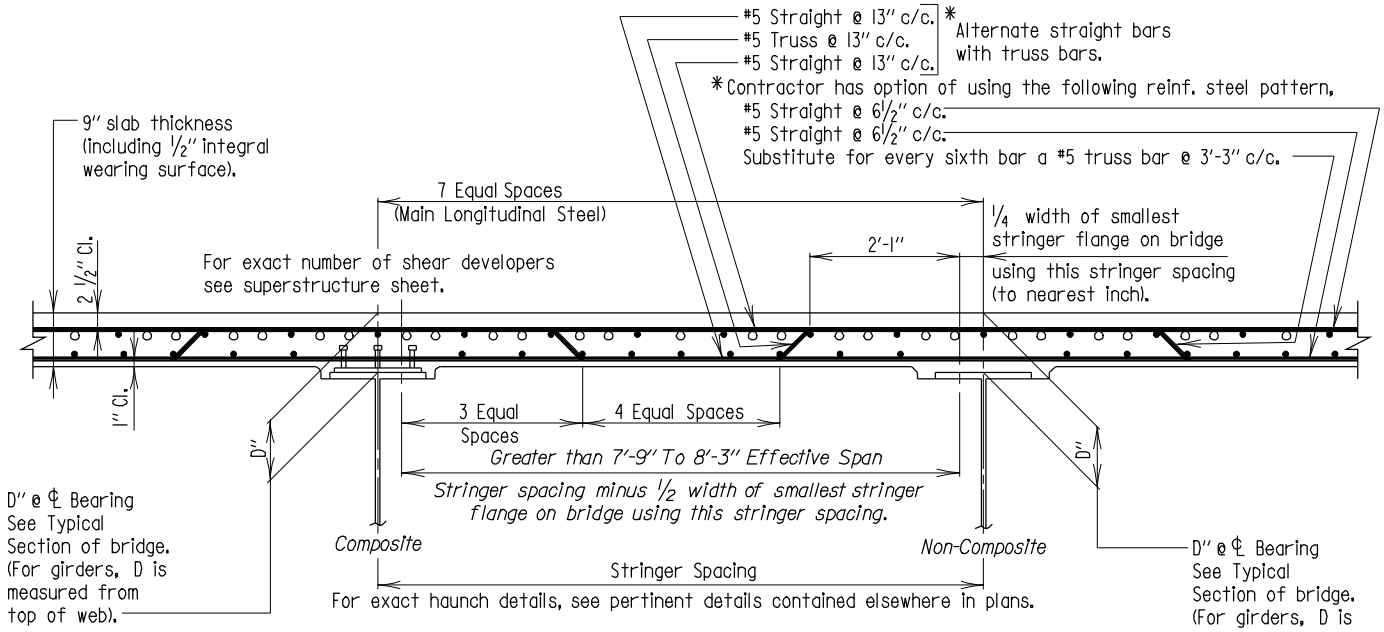
FHWA APPROVAL
DATE: 6-8-90

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

TYPE V AND VI BRIDGE DECK SLABS HS20 LOADING

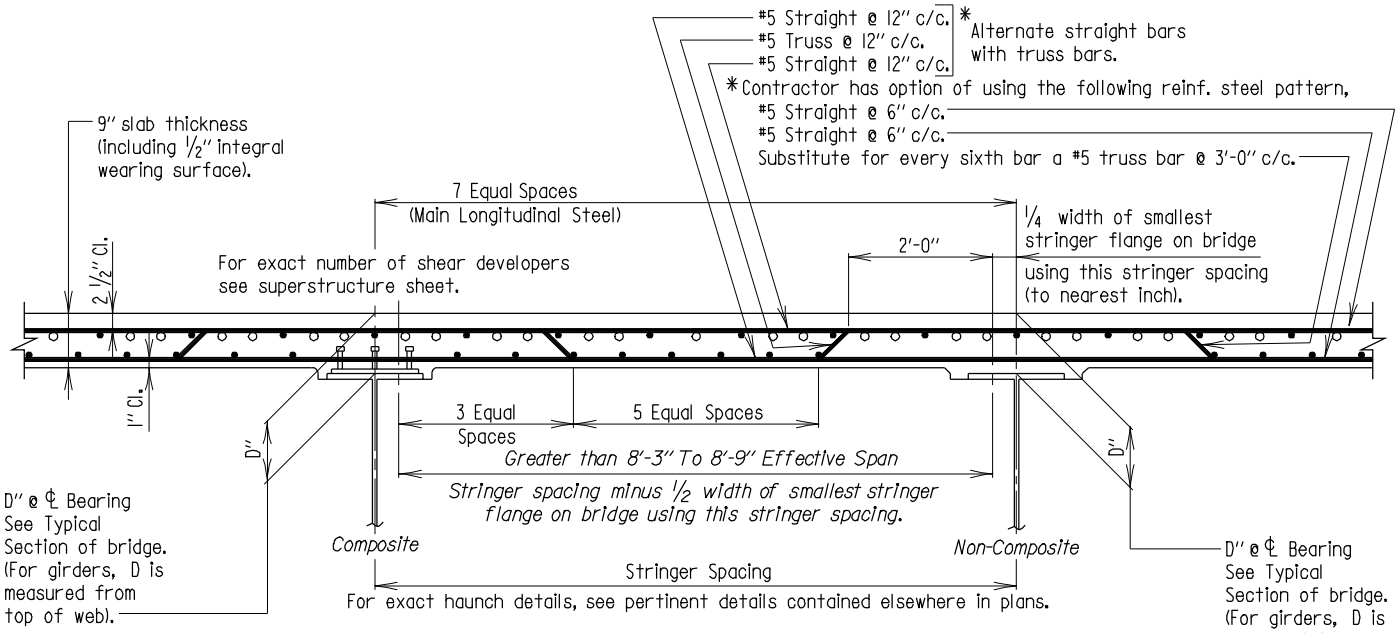
STANDARD NO. BR-SS(6.14)-79-93 **SHEET** 1 **OF** 1

SUPER CONCRETE WORK



HS20 TYPE VII SLAB
GREATER THAN 7'-9" TO 8'-3" EFFECTIVE SPAN

Scale: ⅜"=1'-0"



HS20 TYPE VIII SLAB
GREATER THAN 8'-3" TO 8'-9" EFFECTIVE SPAN

Scale: ⅜"=1'-0"

Note:
Slanted lettering indicates notes "For Office Use Only".

Note:
1. All steel sizes and spacing based on ASTM A-615, Grade 60 (fs=24,000 p.s.i.).
2. Transverse bars to be placed normal to center line of stringers. (For curved girder see BR-SS(6.11)-79-90).
3. All longitudinal bars are to be #5's placed as shown except if Note 4 requires and indicates larger bars.
4. On continuous bridges, over piers, additional longitudinal steel is to be added to the top of the slab between normal bars and is indicated thus ○. See Detail No. BR-SS(6.30)-88-195 for the lengths and size of these additional bars.

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 12/4/79

REVISIONS	
SHA	FHWA
4-21-81	6-8-90
9-20-89	6-8-90
3-22-00	·
1-22-01	·

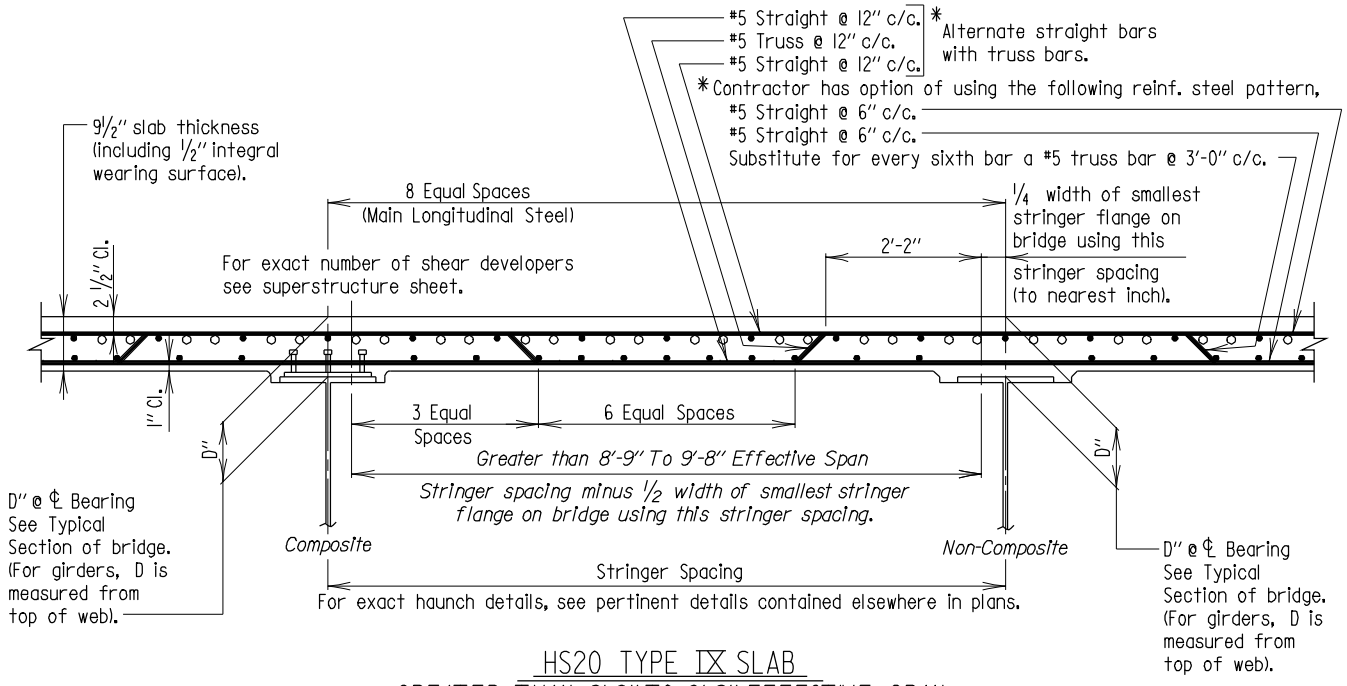
FHWA APPROVAL
DATE: 6-8-90

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

TYPE VII AND VIII BRIDGE DECK SLABS HS20 LOADING

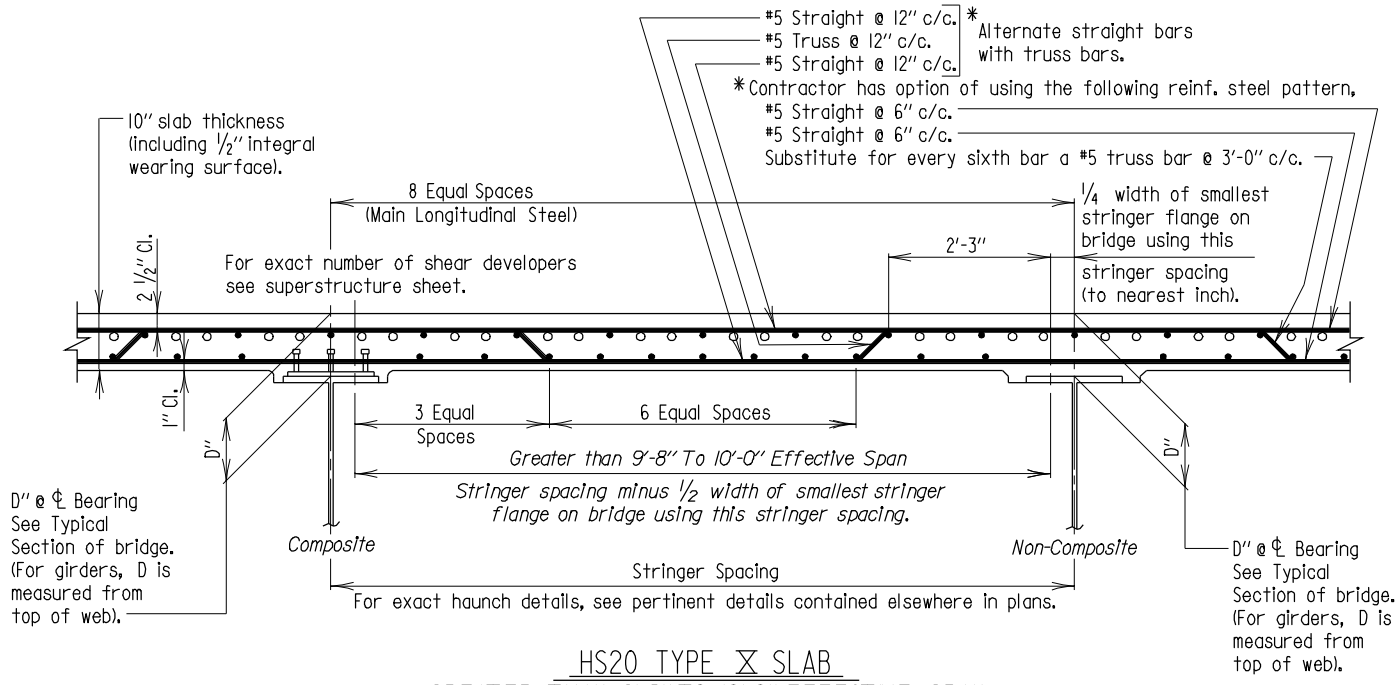
STANDARD NO. BR-SS(6.15)-79-94 **SHEET** 1 **OF** 1

SUPER CONCRETE WORK



HS20 TYPE IX SLAB
GREATER THAN 8'-9" TO 9'-8" EFFECTIVE SPAN

Scale: ⅜"=1'-0"



HS20 TYPE X SLAB
GREATER THAN 9'-8" TO 10'-0" EFFECTIVE SPAN

Scale: ⅜"=1'-0"

Note:
Slanted lettering indicates notes "For Office Use Only".

Note:
1. All steel sizes and spacing based on ASTM A-615, Grade 60 (fs=24,000 p.s.i.).
2. Transverse bars to be placed normal to center line of stringers. (For curved girder see BR-SS(6.11)-79-90).
3. All longitudinal bars are to be #5's placed as shown except if Note 4 requires and indicates larger bars.
4. On continuous bridges, over piers, additional longitudinal steel is to be added to the top of the slab between normal bars and is indicated thus ○. See Detail No. BR-SS(6.30)-88-195 for the lengths and size of these additional bars.

APPROVAL
E.S. Friedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 12/4/79

REVISIONS	
SHA	FHWA
4-21-81	6-8-90
9-20-89	6-8-90
3-22-00	·
1-22-01	·

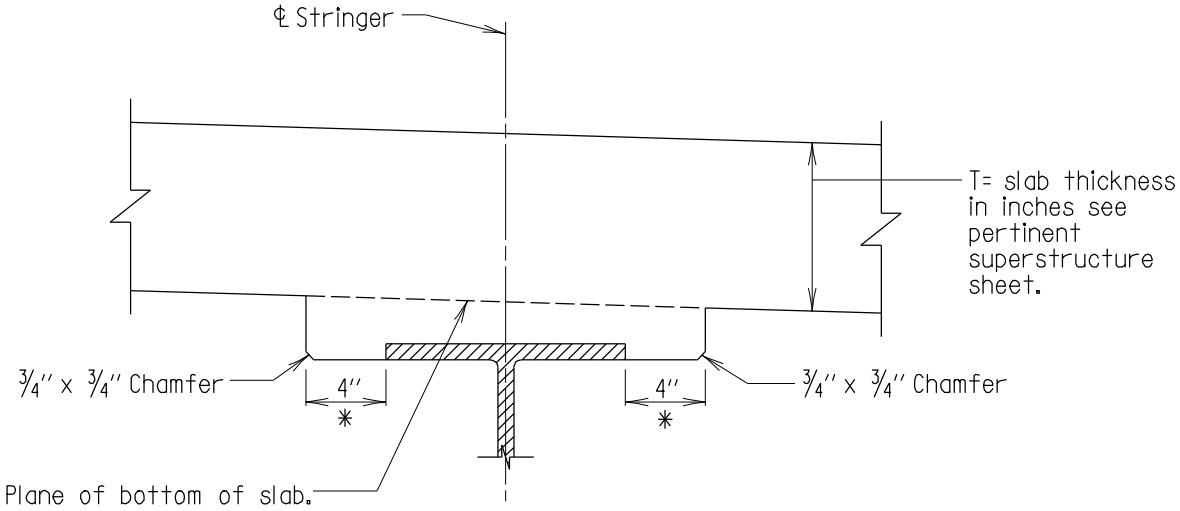
FHWA APPROVAL
DATE: 6-8-90

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

TYPE IX AND X BRIDGE DECK SLABS HS20 LOADING

STANDARD NO. BR-SS(6.16)-79-95 SHEET 1 OF 1

SUPER CONCRETE WORK



SECTION
Scale: None

Note:
1. * Omit concrete haunch by dropping bottom of concrete slab to bottom of top flange on spans of 30'-0'' or less c/c of bearings.

APPROVAL
E.S. Friedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 11/15/79

REVISIONS	
SHA	FHWA
3-3-93	·
·	·
·	·
·	·

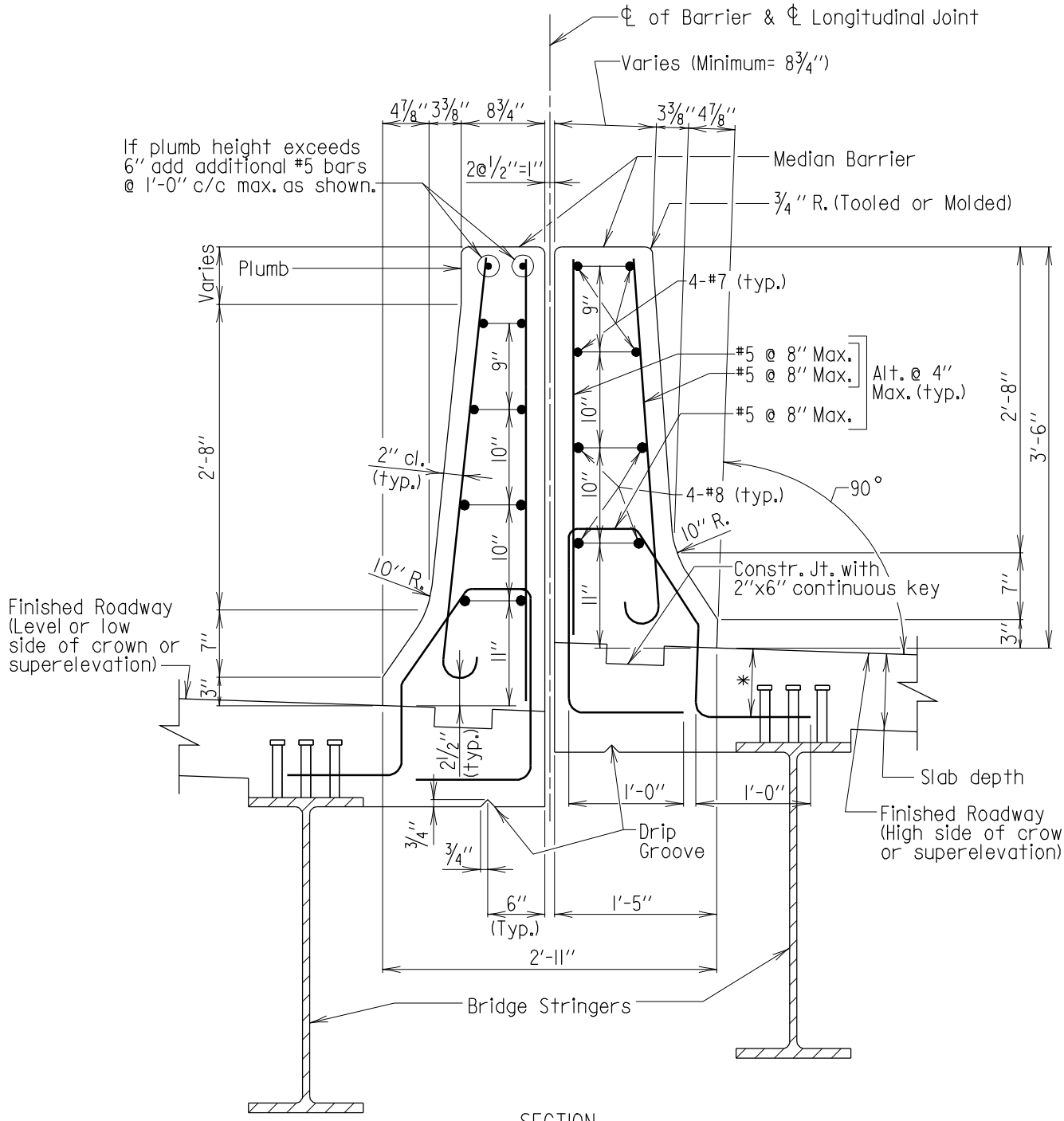
FHWA APPROVAL
DATE: 12-12-79

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

CONCRETE HAUNCH DETAIL FOR
BRIDGE DECKS FORMED WITH TIMBER

STANDARD NO. BR-SS(6.17)-79-98 SHEET 1 OF 1

SUPER - CONCRETE WORK



SECTION

Scale : ¾" = 1'-0"

*Slab depth minus 1".

Notes:

1. All #7 and #8 longitudinal bars shall be placed continuously in the barrier from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multi span bridge.
2. All reinforcing steel epoxy coated.
3. Concrete deck reinforcing steel not shown.
4. Place ½" saw cut joints to match joint spacing of outside parapet.
5. All keys are nominal size.
6. No increase in any prices bid will be allowed for barrier modifications due to roadway slope.

42" MEDIAN TL-5 BRIDGE RAILING

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 4/28/80

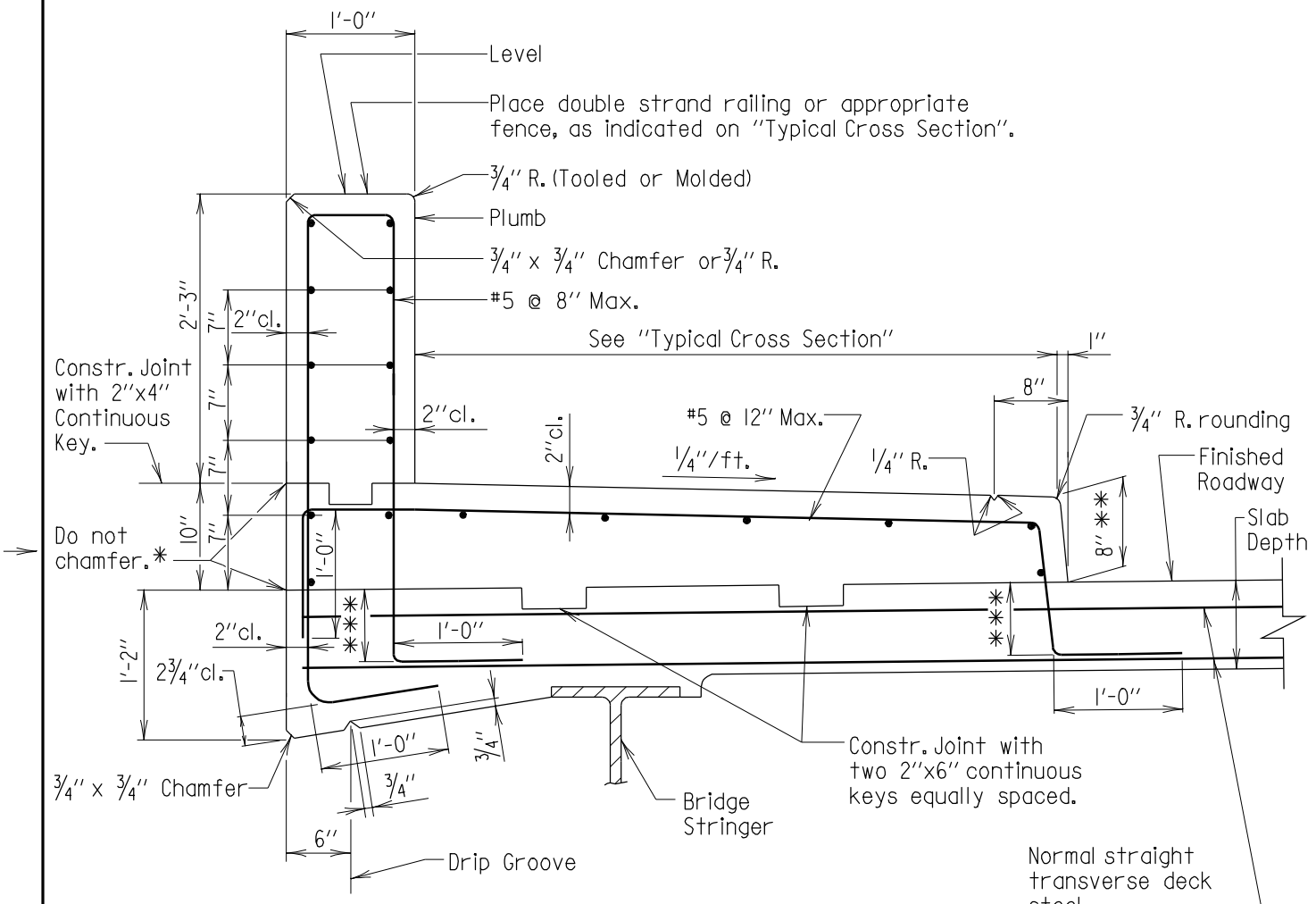
REVISIONS		
	SHA	FHWA
	10-31-90	·
	6-5-91	·
FHWA APPROVAL	10-22-03	·
DATE: .	11-26-07	·

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

42" F-SHAPE MEDIAN BARRIER
FOR BRIDGE WITH OPEN LONGITUDINAL JOINT

STANDARD NO. BR-SS(6.19)-03-104 SHEET 1 OF 1

SUPER CONCRETE WORK



SECTION

Scale : 3/4"=1'-0"

* In order to insure a smooth and acceptable surface, 420.03.11 (Constr. joints) shall be strictly adhered to.

** Unless otherwise indicated on "Typical Cross Section".

*** Slab Depth - 1"

Notes:

1. All longitudinal bars are #5 spaced as shown and shall be placed continuously in the parapet from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multi span bridge.
2. All keys are nominal size.
3. Portions of normal longitudinal deck steel and truss bars are not shown.
4. All reinforcing steel to be epoxy coated.

SIDEWALK WITH STRAIGHT BACK

APPROVAL
E.S. Friedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 5/15/80

REVISIONS	
SHA	FHWA
1-22-01	·
10-22-03	·
11-18-05	·
11-26-07	·

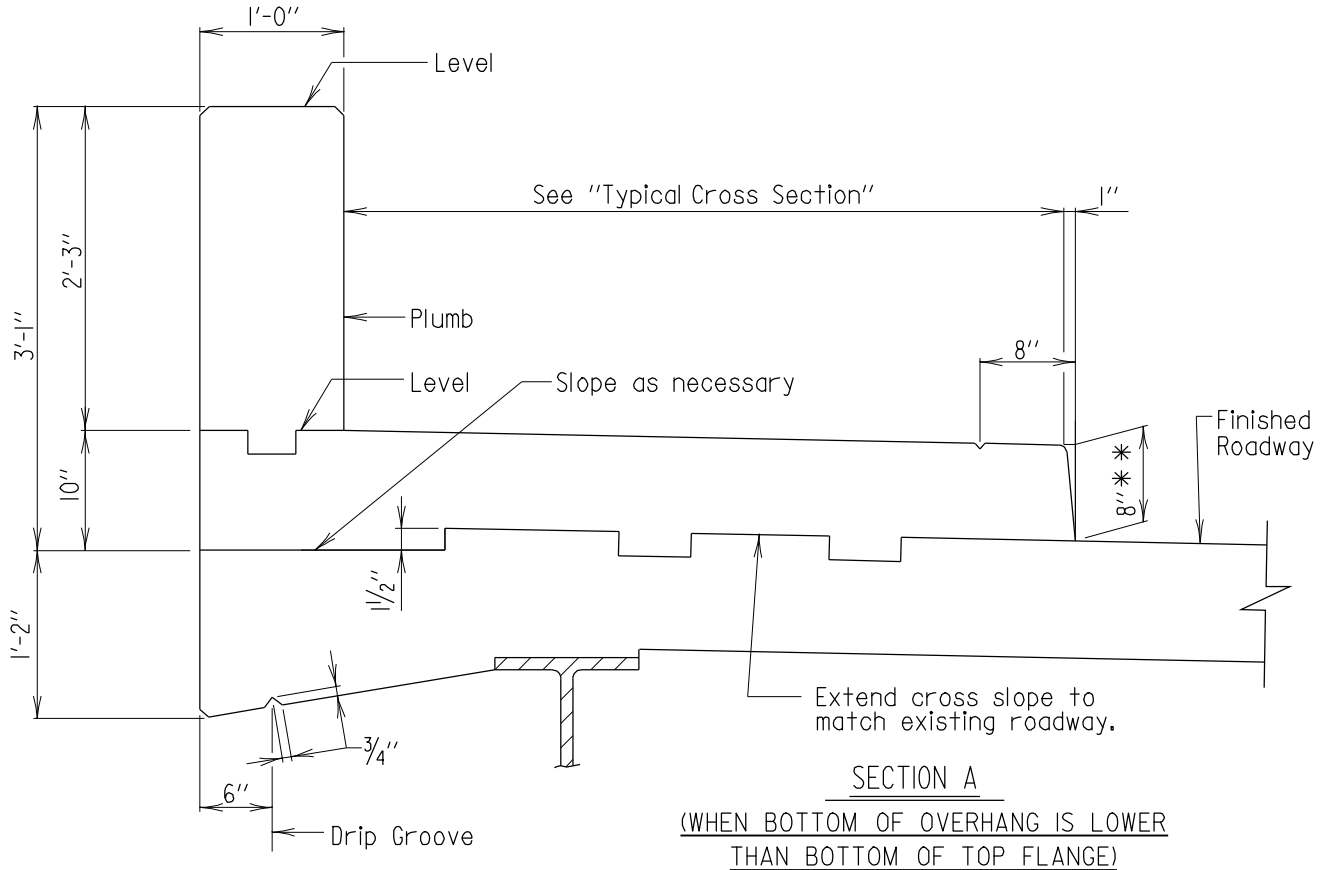
FHWA APPROVAL
DATE: 7-29-80

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

LEVEL OR LOW SIDE OF CROWN (OR SUPERELEVATED) SECTION OF SIDEWALK AND PARAPET WITH STRAIGHT BACK

STANDARD NO. BR-SS(6.21)-03-106 SHEET 1 OF 2

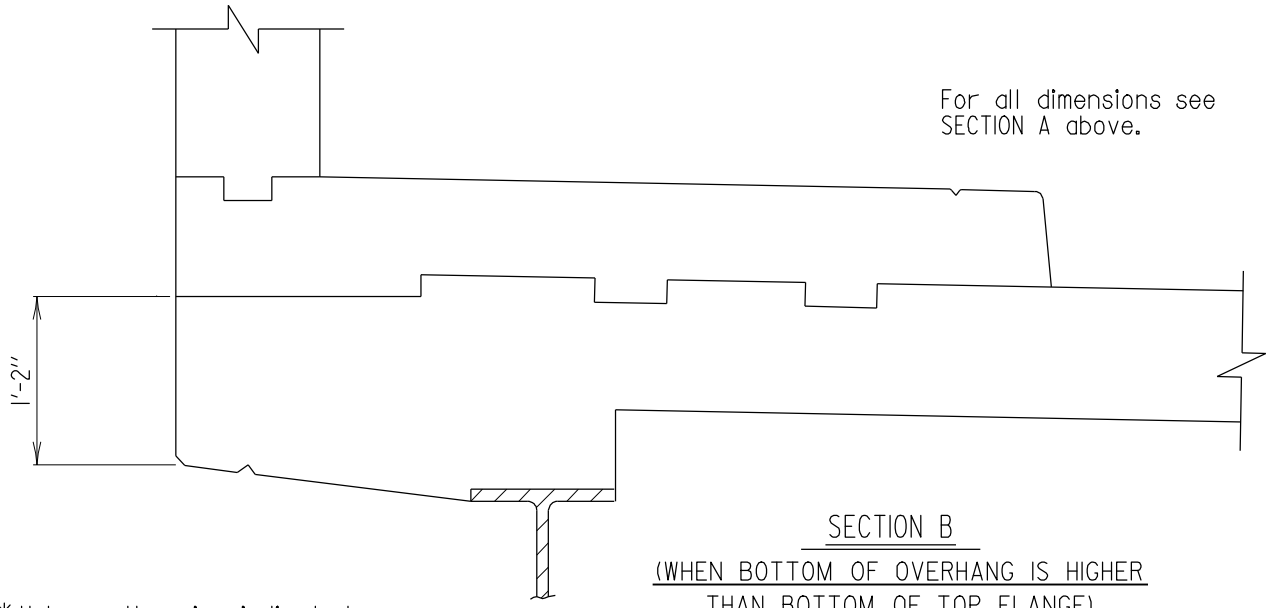
SUPER CONCRETE WORK



SECTION A

(WHEN BOTTOM OF OVERHANG IS LOWER THAN BOTTOM OF TOP FLANGE)

Scale: ¾" = 1'-0"



SECTION B

(WHEN BOTTOM OF OVERHANG IS HIGHER THAN BOTTOM OF TOP FLANGE)

Scale: ¾" = 1'-0"

** Unless otherwise indicated on "Typical Cross Section".

SIDEWALK WITH STRAIGHT BACK

Note:
For all details not shown see sheet 1 of 2.

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 7/2/98

REVISIONS	
SHA	FHWA
10-22-03	·
11-18-05	·

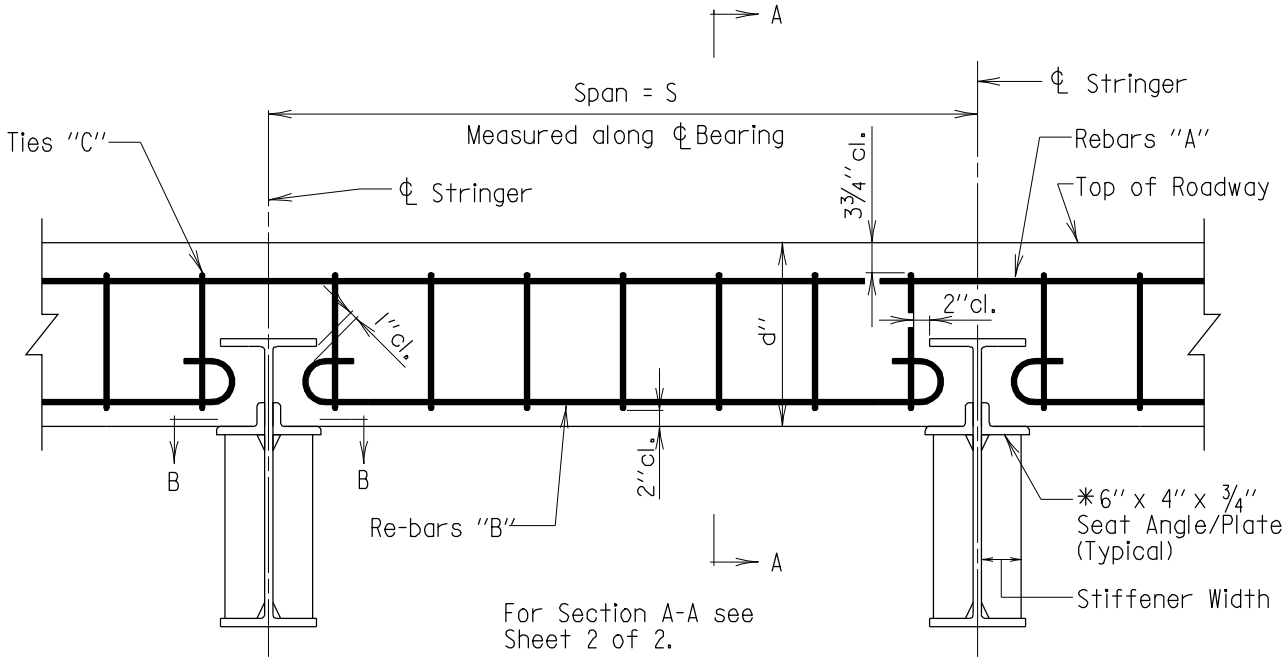
FHWA APPROVAL	·	·
DATE: ·	·	·

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

HIGH SIDE OF CROWN (OR SUPERELEVATED) SECTION OF SIDEWALK AND PARAPET WITH STRAIGHT BACK

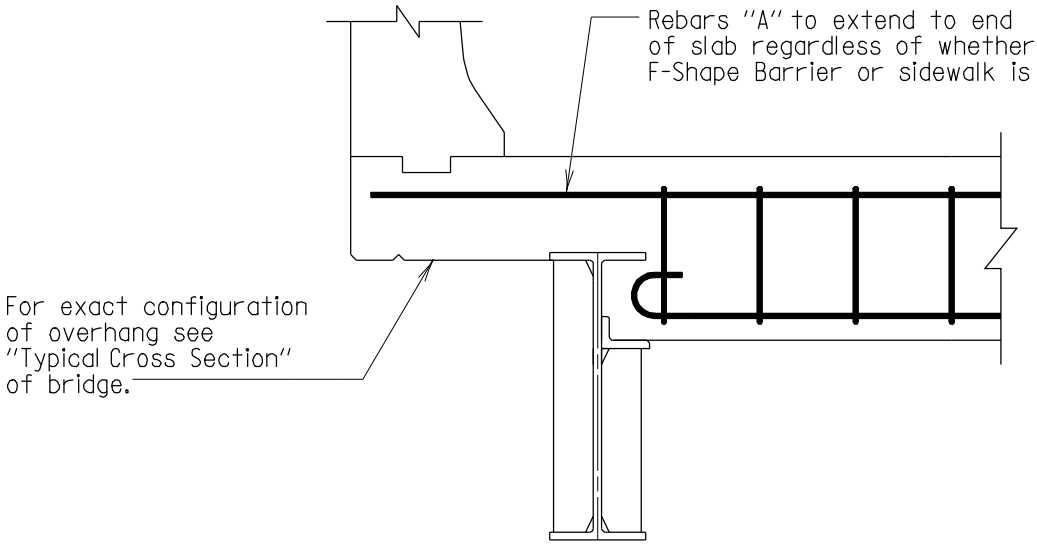
STANDARD NO. BR-SS(6.21)-03-106 SHEET 2 OF 2

SUPER CONCRETE WORK



ELEVATION AT INTERIOR BEAM

Scale: ½"=1'-0"



ELEVATION AT EXTERIOR BEAM

Scale: ½"=1'-0"

Note:

1. For Section B-B, see Standard No. BR-SS(8.12)-85-170.
2. * Longest leg of angle shall be increased as necessary so that angle exceeds stiffener width by at least ½". In lieu of the seat angle a ¾" plate may be used. The plate shall be a minimum of 6" wide and shall exceed stiffener width by at least ½".

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 10/15/80

REVISIONS	
SHA	FHWA
2-19-92	·
2-14-00	·
1-22-01	·
10-22-03	·

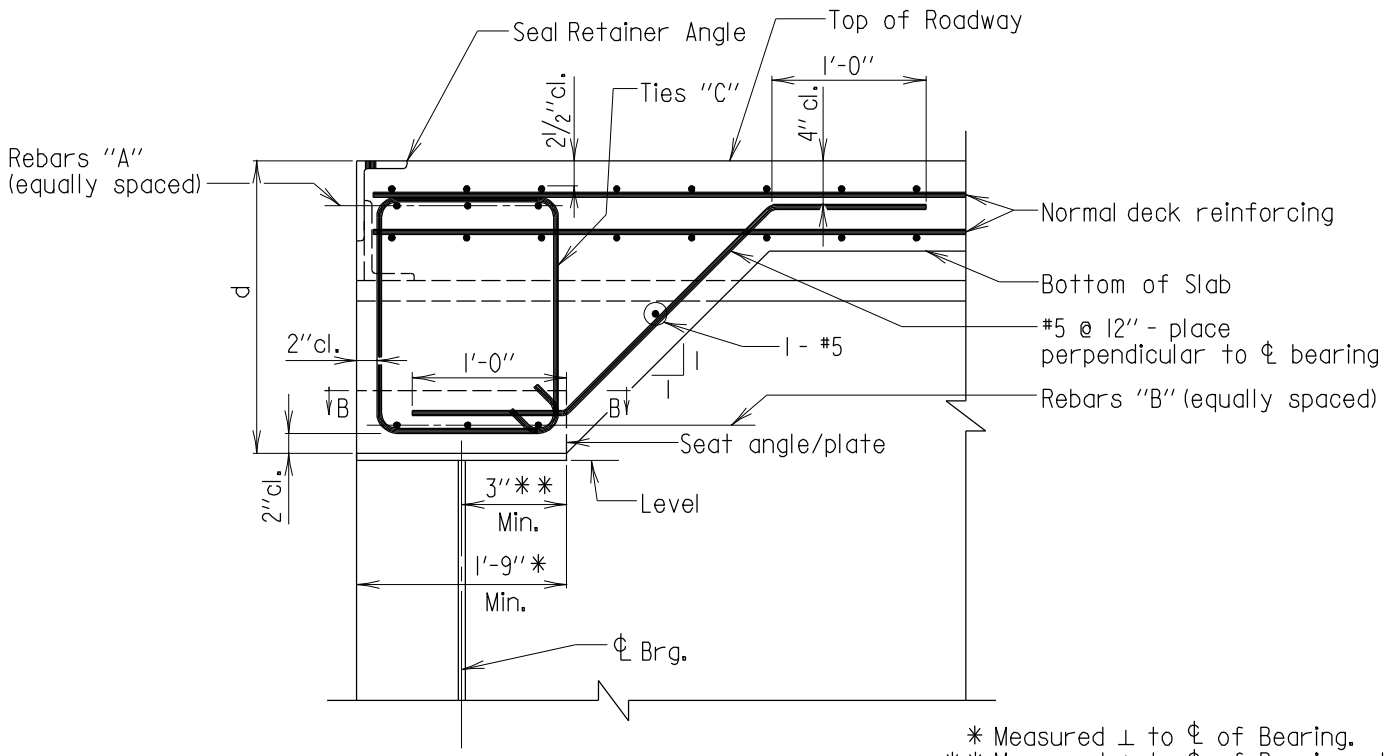
FHWA APPROVAL
DATE: 6-8-90

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

CONCRETE DIAPHRAGMS AT PIERS (WITH EXPANSION JOINTS) AND AT ALL ABUTMENTS

STANDARD NO. BR-SS(6.22)-80-120 SHEET 1 OF 2

SUPER CONCRETE WORK



* Measured ⊥ to ℄ of Bearing.
** Measured ⊥ to ℄ of Bearing at Edge of Bearing Stiffener.

SECTION A-A
Scale: None

Span = S	Depth of Diaphragm = d	Re-bars "A"	Re-bars "B"	Ties "C"
Up to 8'	1'-11"	3-#7's	3-#7's	#5 @ 9" Maximum Spacing Place ⊥ to ℄ Bearing
over 8' to 11'	1'-11"	3-#8's	3-#8's	
over 11' to 14'	2'-0"	3-#8's	3-#8's	
over 14' to 16'	2'-1"	3-#9's	3-#9's	

Note:
1. Studs and anchors for seal retainer angle, not shown.
2. All reinforcing steel sizes and spacings based on ASTM A-615, Grade 60 fy = 60 ksi.
3. For Section B-B, see Standard No. BR-SS(8.12)-85-170.

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 10/15/80

REVISIONS	
SHA	FHWA
2-14-00	·
1-22-01	·
10-9-07	·
7-18-94	·

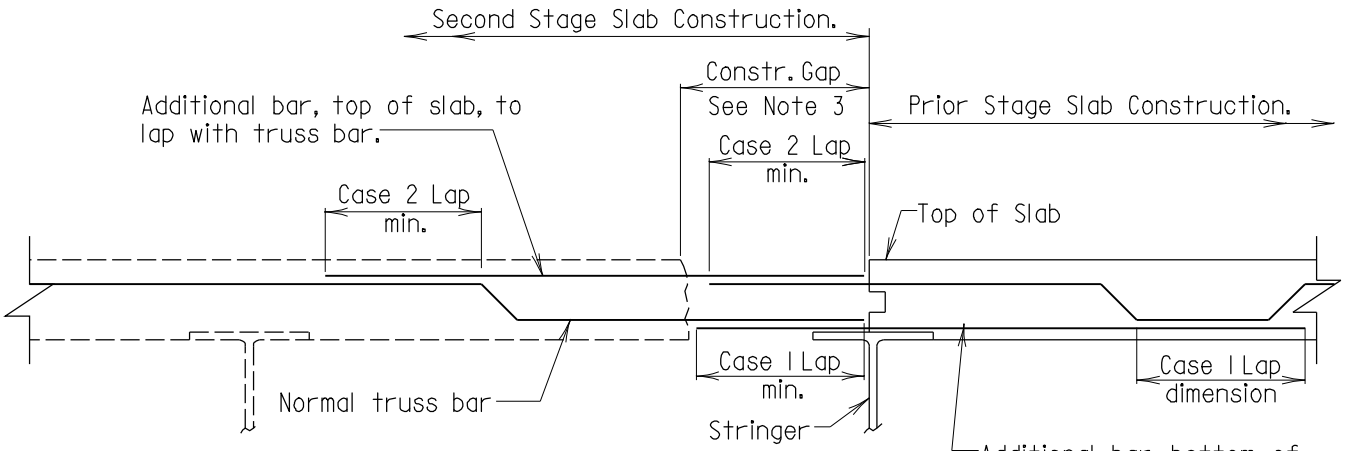
FHWA APPROVAL
DATE: 6-8-90

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

CONCRETE DIAPHRAGMS AT PIERS (WITH EXPANSION JOINTS) AND AT ALL ABUTMENTS

STANDARD NO. BR-SS(6.22)-80-120 SHEET 2 OF 2

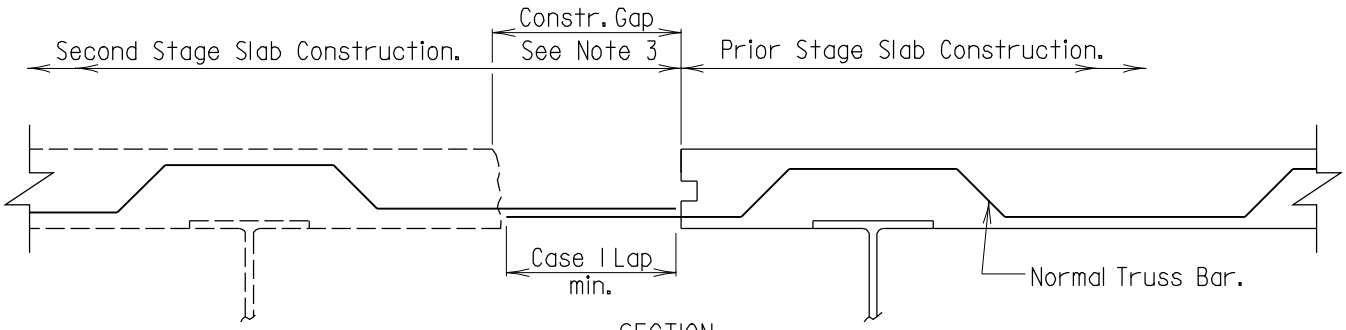
SUPER CONCRETE WORK



SECTION

TYPE I SPLICE

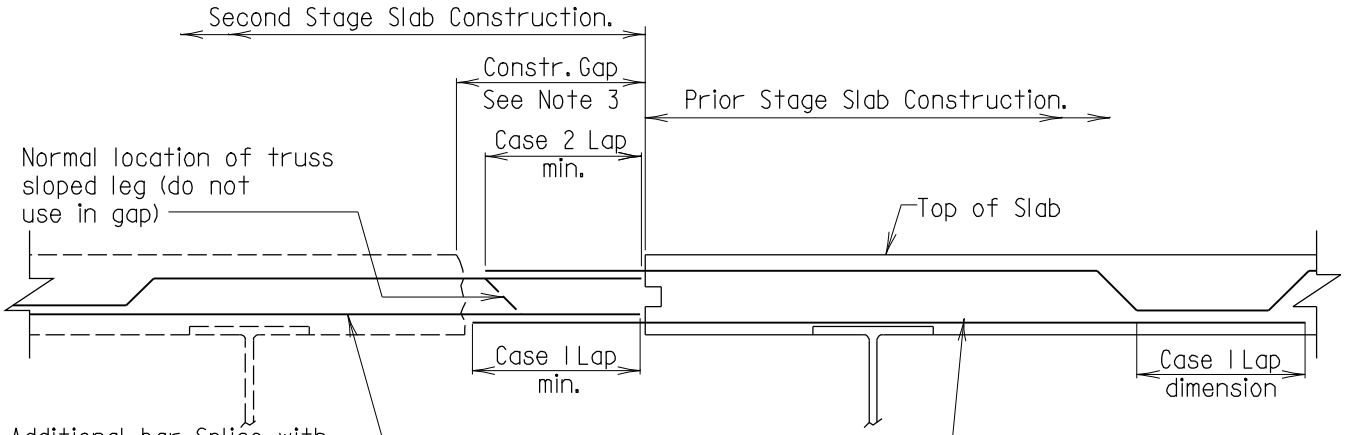
Scale: 1/2" = 1'-0"



SECTION

TYPE II SPLICE

Scale: 1/2" = 1'-0"



SECTION

TYPE III SPLICE

Scale: 1/2" = 1'-0"

Notes:

1. See appropriate lap charts for Case 1 and Case 2 splice dimensions.
2. See Std. No. BR-SS(6.42)-95-311 for Longitudinal and Additional Top Bar over Pier lap length notes.
3. Min. Constr. Gap dim. = Case 1 Lap + 1".
4. See Contract Drawing for construction gap location.

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 10/3/83

REVISIONS	
SHA	FHWA
3-9-89	6-8-90
2-19-92	·
11-15-95	·
1-22-01	·

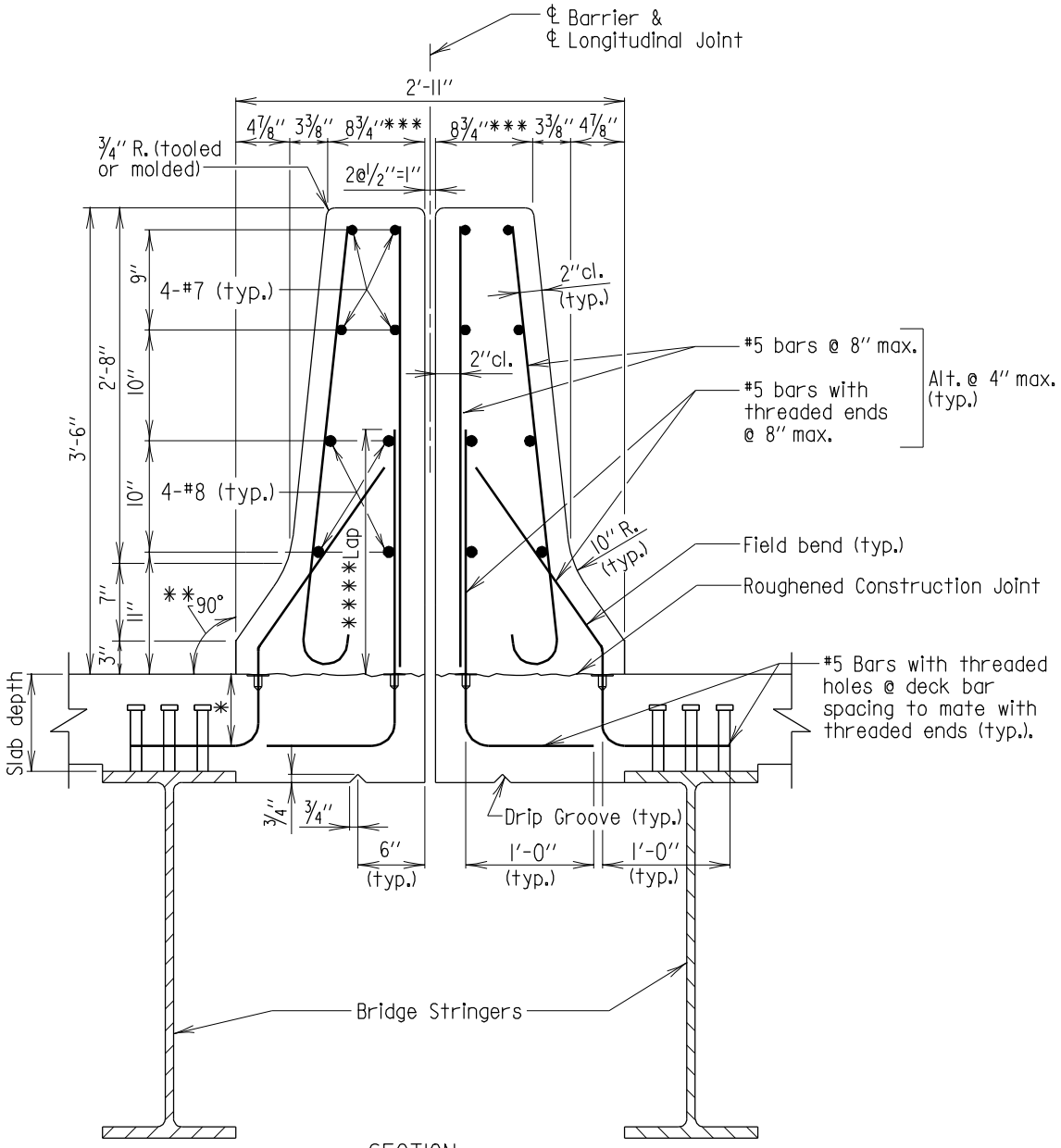
FHWA APPROVAL
DATE: 10-5-83

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

SPLICING OF BRIDGE DECK SLAB TRUSS BARS DURING STAGE CONSTRUCTION LAP SPLICE ALTERNATIVES

STANDARD NO. BR-SS(6.23)-83-149 SHEET 1 OF 1

SUPER CONCRETE WORK



SECTION

Scale: 3/4" : 1'-0"

* Slab depth minus 1".
** For high side of crown or superelevation, otherwise this is a vertical line that all dimensions are measured from.
*** These dimensions can change if superelevation affects barrier face alignment.
**** Dowel may replace vertical by being extended full height.

Notes:

1. All #7 and #8 longitudinal bars shall be placed continuously in the barrier from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multi span bridge.
2. All reinforcement bars shall be epoxy coated.
3. The Contractor has the option of substituting cast-in-place epoxy coated open coil inserts with threaded holes for the bars shown. The inserts in the back face of the parapet shall have a minimum working load tension strength of 6000 lb. and a minimum length of 4 1/2". The inserts in the front face shall have a minimum working load tension strength of 8000 lb. and a minimum length of 5 1/2". The cost of epoxy coated inserts shall be included in the pertinent Superstructure Concrete item.
4. Concrete deck reinforcing steel not shown.
5. Place 1/2" saw cut joints to match joint spacing of outside parapet.
6. No increase in any prices bid will be allowed for barrier modifications due to roadway slope or maintenance of traffic.

42'' MEDIAN

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 11/2/83

REVISIONS	
SHA	FHWA
8-17-90	·
10-26-90	·
7-2-93	·
10-22-03	·

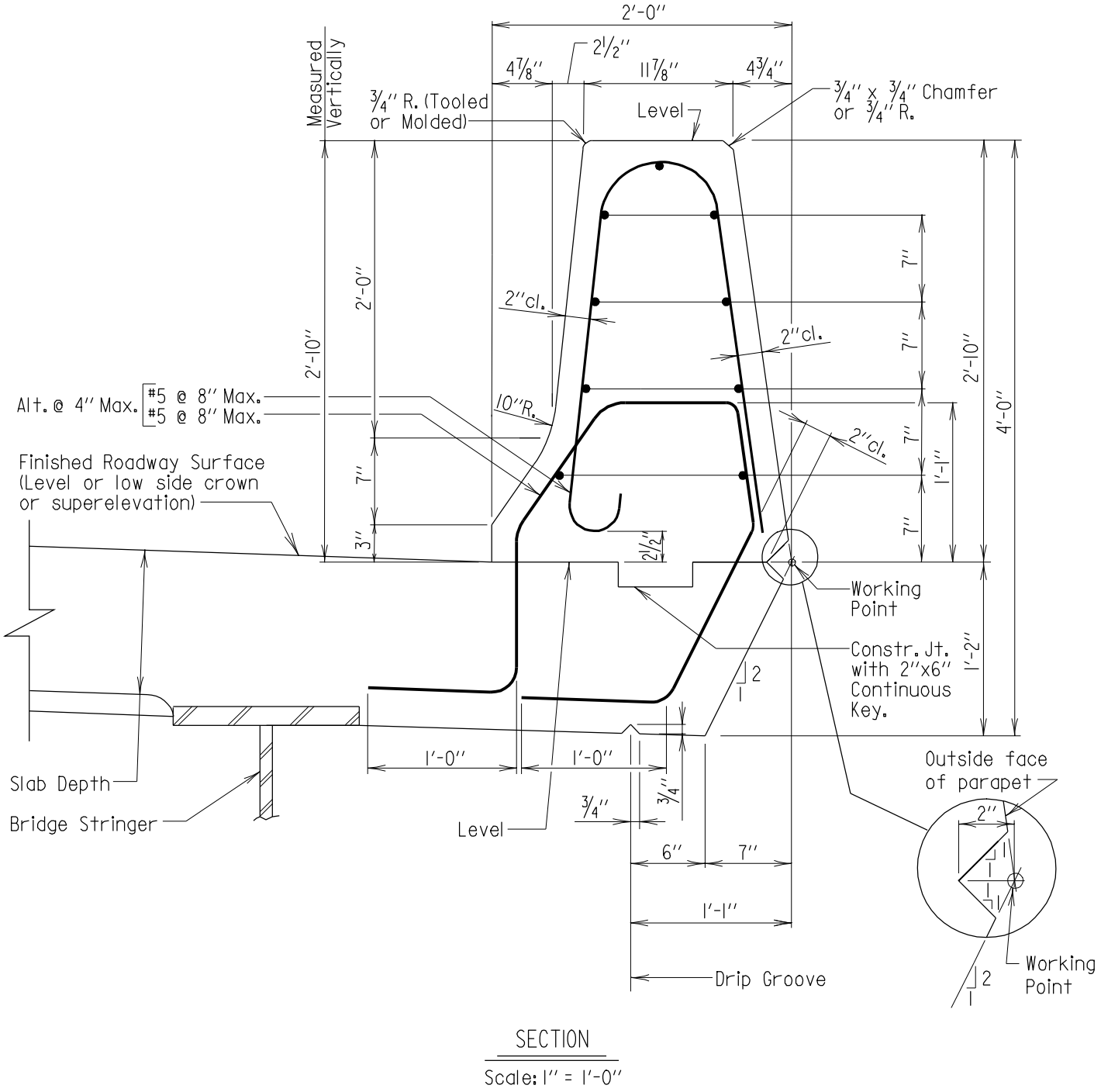
FHWA APPROVAL
DATE: 12-9-83

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

42'' F-SHAPE MEDIAN BARRIER FOR BRIDGE WITH LONGITUDINAL JOINT WHERE TRAFFIC WILL USE AREA PRIOR TO PLACING BARRIER

STANDARD NO. BR-SS(6.24)-03-156 SHEET 1 OF 1

SUPER CONCRETE WORK



SECTION

Scale: 1" = 1'-0"

Notes:

1. All longitudinal bars are #5 spaced as shown and shall be placed continuously in the parapet from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multi span bridge.
2. Key is nominal size.
3. Front face of parapet to be dimensioned from a plumb line.
4. All reinforcing steel to be epoxy coated.
5. Concrete deck reinforcing steel not shown.

34'' DIAMOND BACK TL-4 BRIDGE RAILING

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/15/84

REVISIONS	
SHA	FHWA
4-27-90	·
10-3-90	·
10-22-03	·
11-26-07	·

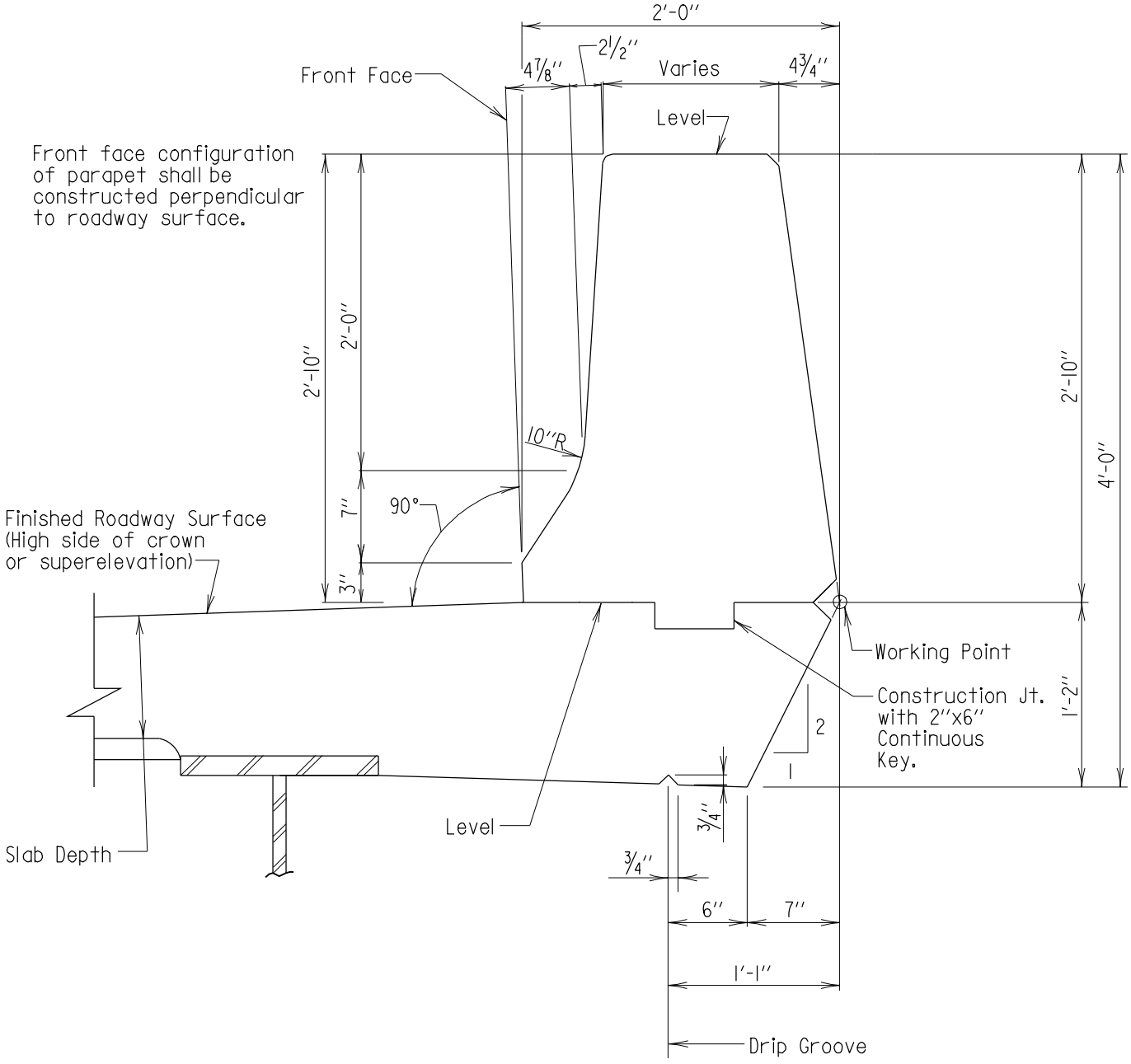
FHWA APPROVAL
DATE: .

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

LEVEL OR LOW SIDE OF CROWN (OR SUPERELEVATED) SECTION OF 34" F-SHAPE PARAPET WITH DIAMOND BACK

STANDARD NO. BR-SS(6.25)-03-159A SHEET 1 OF 2

SUPER CONCRETE WORK



SECTION

Scale: 1" = 1'-0"

34'' DIAMOND BACK TL-4 BRIDGE RAILING

Note:
For all details not shown see sheet 1 of 2.

APPROVAL
E.S. Friedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/15/84

REVISIONS	
SHA	FHWA
1-19-89	3-5-90
10-3-90	·
10-22-03	·
11-26-07	·

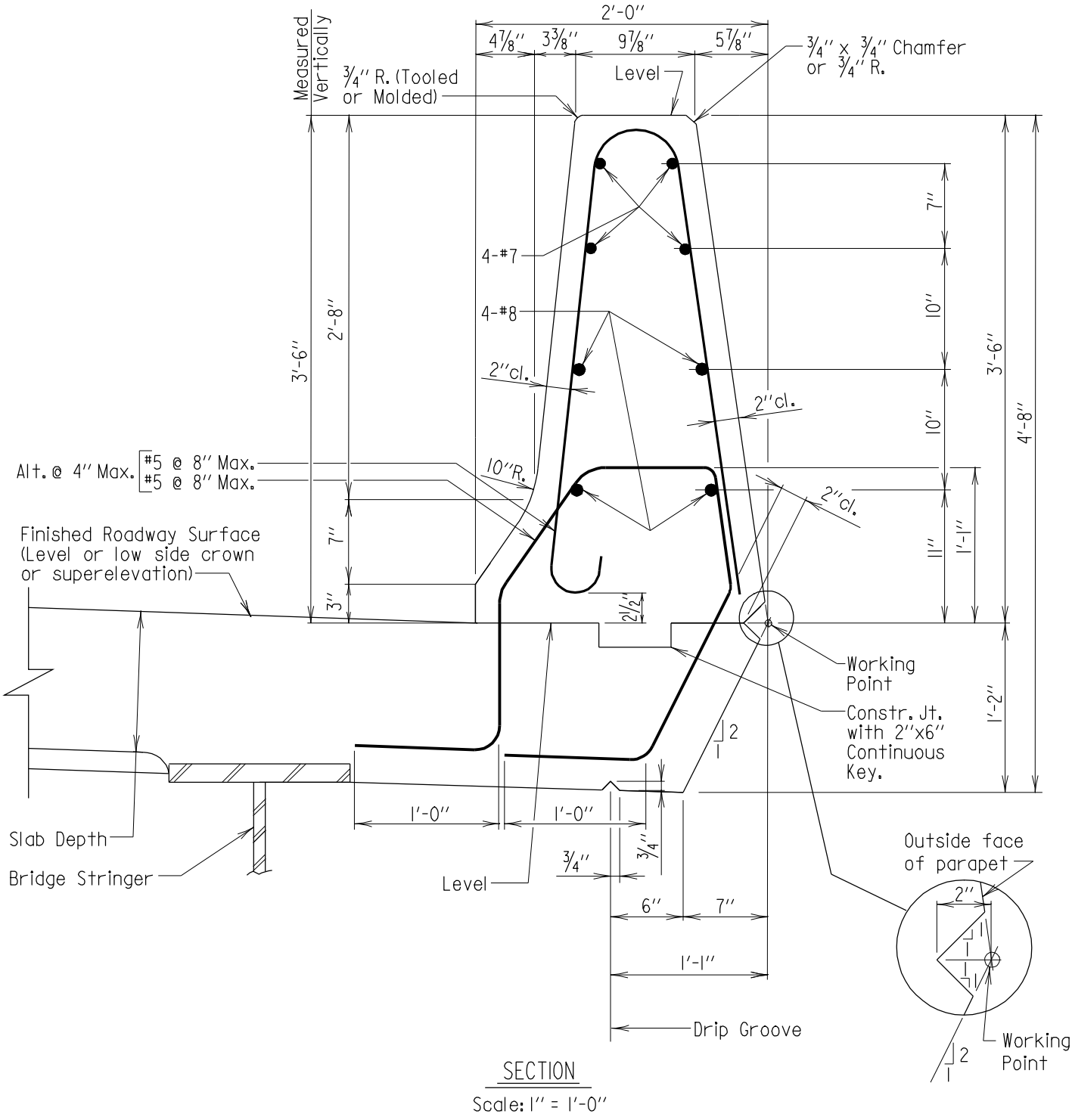
FHWA APPROVAL	
DATE:	

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

HIGH SIDE OF CROWN (OR SUPERELEVATED) SECTION OF 34'' F-SHAPE PARAPET WITH DIAMOND BACK

STANDARD NO. BR-SS(6.25)-03-159A SHEET 2 OF 2

SUPER CONCRETE WORK



SECTION

Scale: 1" = 1'-0"

Notes:

1. All #7 and #8 longitudinal bars shall be placed continuously in the parapet from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multi span bridge.
2. Key is nominal size.
3. Front face of parapet to be dimensioned from a plumb line.
4. All reinforcing steel to be epoxy coated.
5. Concrete deck reinforcing steel not shown.

42'' DIAMOND BACK TL-5 BRIDGE RAILING

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 10/22/03

REVISIONS	
SHA	FHWA
11-26-07	·
·	·
·	·
·	·

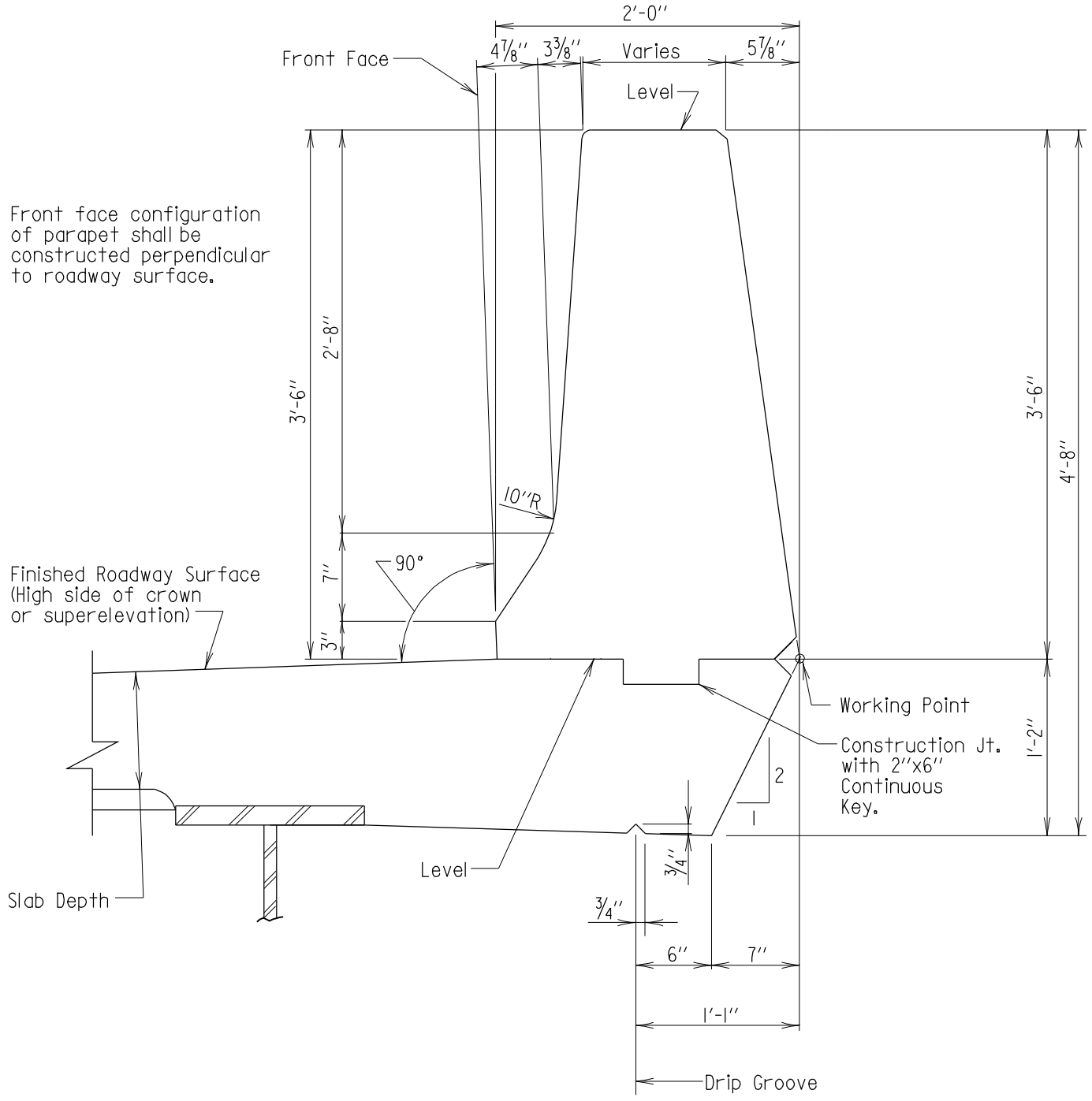
FHWA APPROVAL
DATE: .

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

LEVEL OR LOW SIDE OF CROWN (OR SUPERELEVATED) SECTION OF 42" F-SHAPE PARAPET WITH DIAMOND BACK

STANDARD NO. BR-SS(6.25)-03-159B SHEET 1 OF 2

SUPER CONCRETE WORK



SECTION

Scale: 1" = 1'-0"

42'' DIAMOND BACK TL-5 BRIDGE RAILING

Note:
For all details not shown see sheet 1 of 2.

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 10/22/03

REVISIONS	
SHA	FHWA
12-29-03	·
11-26-07	·

FHWA APPROVAL	·	·
DATE: ·	·	·

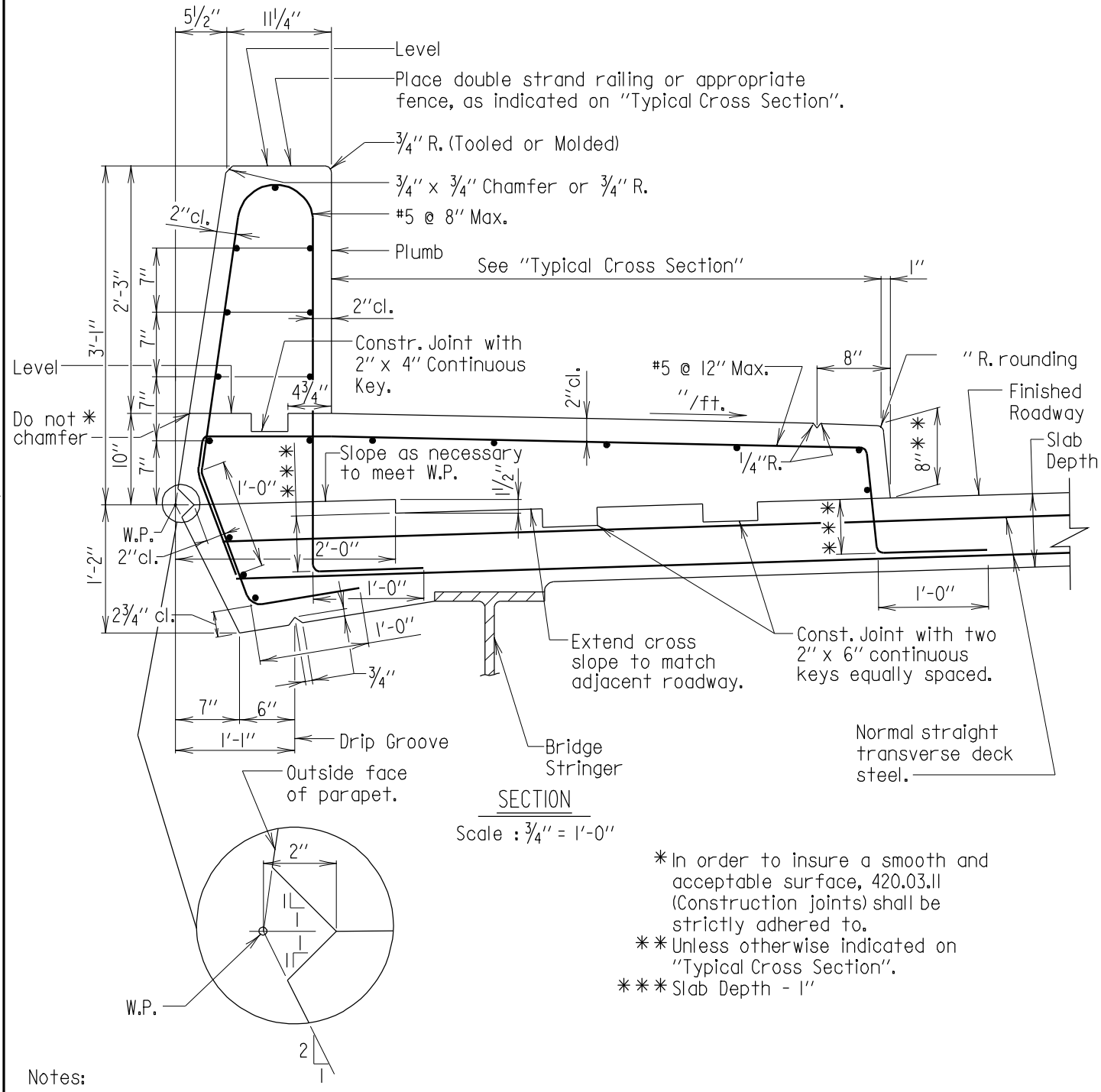
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

HIGH SIDE OF CROWN (OR SUPERELEVATED) SECTION OF 42" F-SHAPE PARAPET WITH DIAMOND BACK

STANDARD NO. BR-SS(6.25)-03-159B

SHEET 2 OF 2

SUPER CONCRETE WORK



* In order to insure a smooth and acceptable surface, 420.03.11 (Construction joints) shall be strictly adhered to.
** Unless otherwise indicated on "Typical Cross Section".
*** Slab Depth - 1"

Notes:

1. All longitudinal bars are #5 spaced as shown and shall be placed continuously in the parapet from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multi span bridge.
2. All keys are nominal size.
3. Portions of normal longitudinal deck steel and truss bars are not shown.
4. W.P. = Working Point.
5. All reinforcing steel to be epoxy coated.

SIDEWALK WITH DIAMOND BACK

APPROVAL
E.S. Friedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 7/31/84

REVISIONS	
SHA	FHWA
9-24-96	·
10-22-03	·
11-18-05	·
11-26-07	·

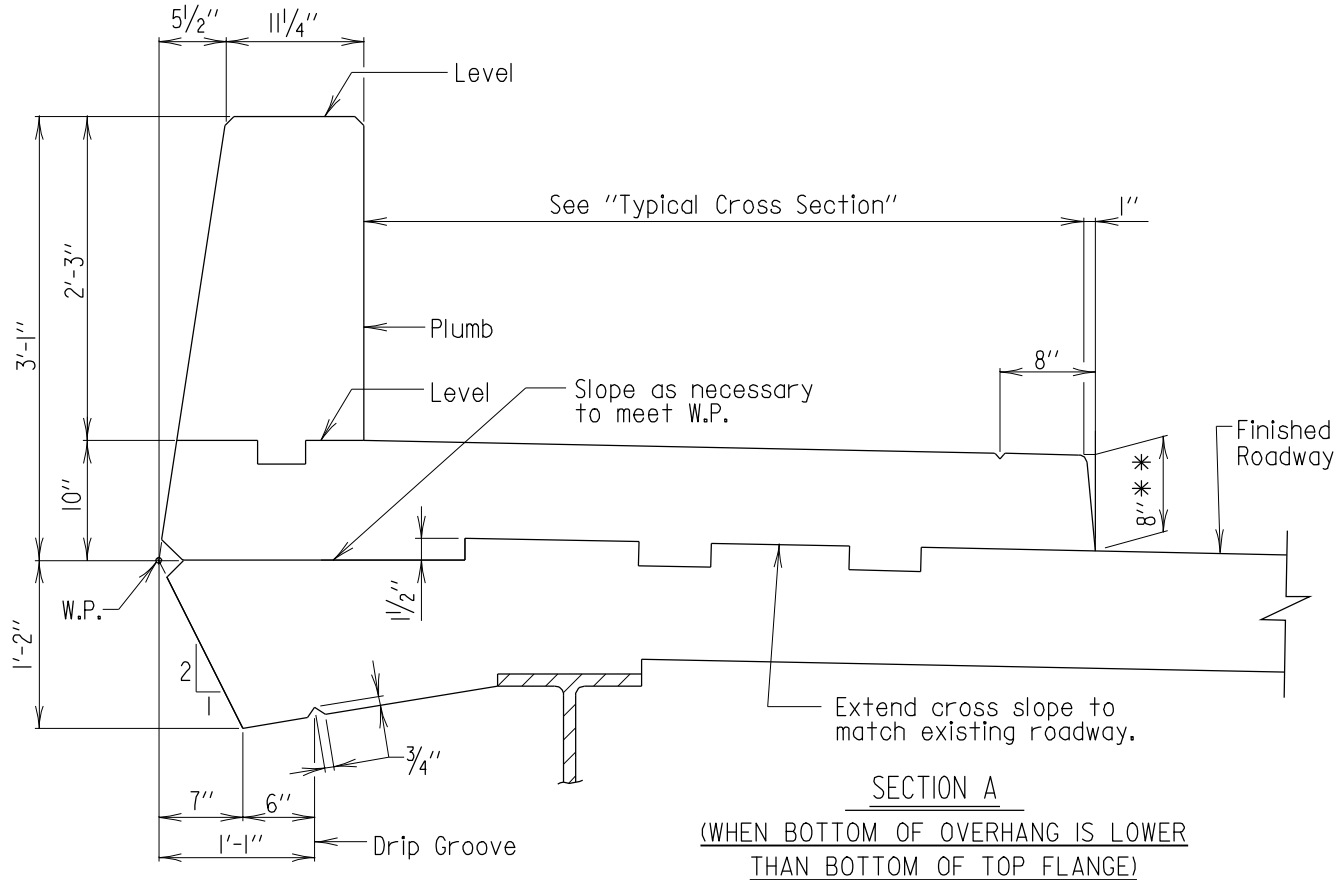
FHWA APPROVAL
DATE: 11-8-84

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

LEVEL OR LOW SIDE OF CROWN (OR SUPERELEVATED) SECTION OF SIDEWALK AND PARAPET WITH DIAMOND BACK

STANDARD NO. BR-SS(6.26)-03-161 SHEET 1 OF 2

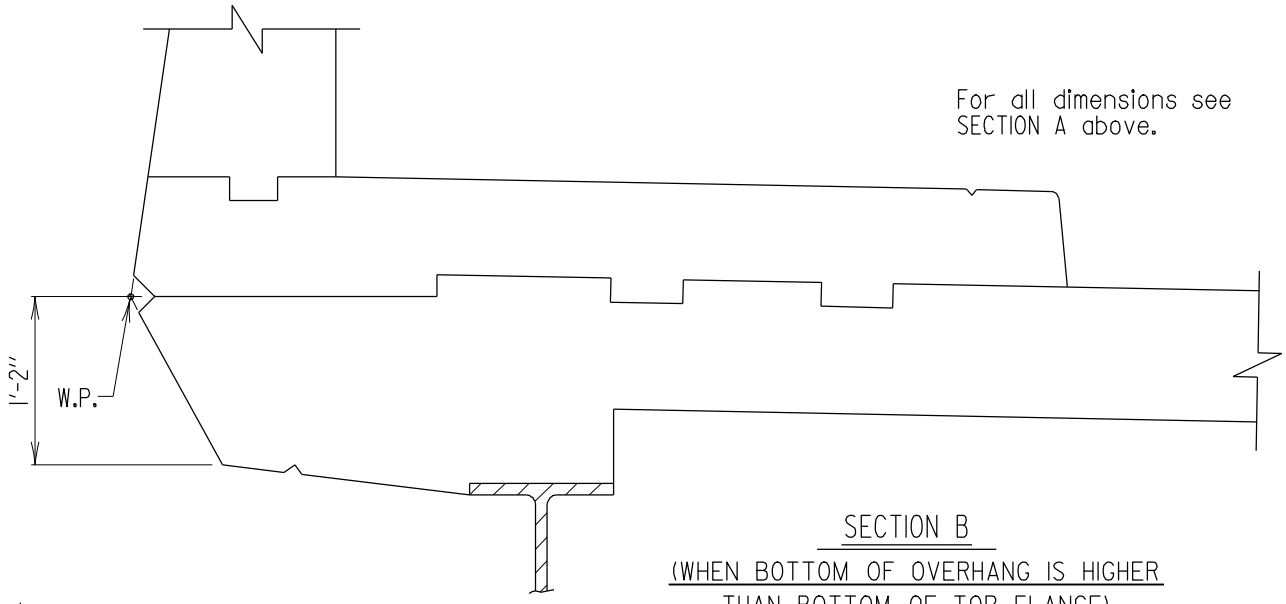
SUPER CONCRETE WORK



SECTION A

(WHEN BOTTOM OF OVERHANG IS LOWER THAN BOTTOM OF TOP FLANGE)

Scale: ¾'' = 1'-0''



SECTION B

(WHEN BOTTOM OF OVERHANG IS HIGHER THAN BOTTOM OF TOP FLANGE)

Scale: ¾'' = 1'-0''

** Unless otherwise indicated on "Typical Cross Section".

SIDEWALK WITH DIAMOND BACK

Note:
For all details not shown see sheet 1 of 2.

APPROVAL
E.S. Friedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 5/11/90

REVISIONS	
SHA	FHWA
7-6-92	·
9-24-96	·
10-22-03	·
11-18-05	·

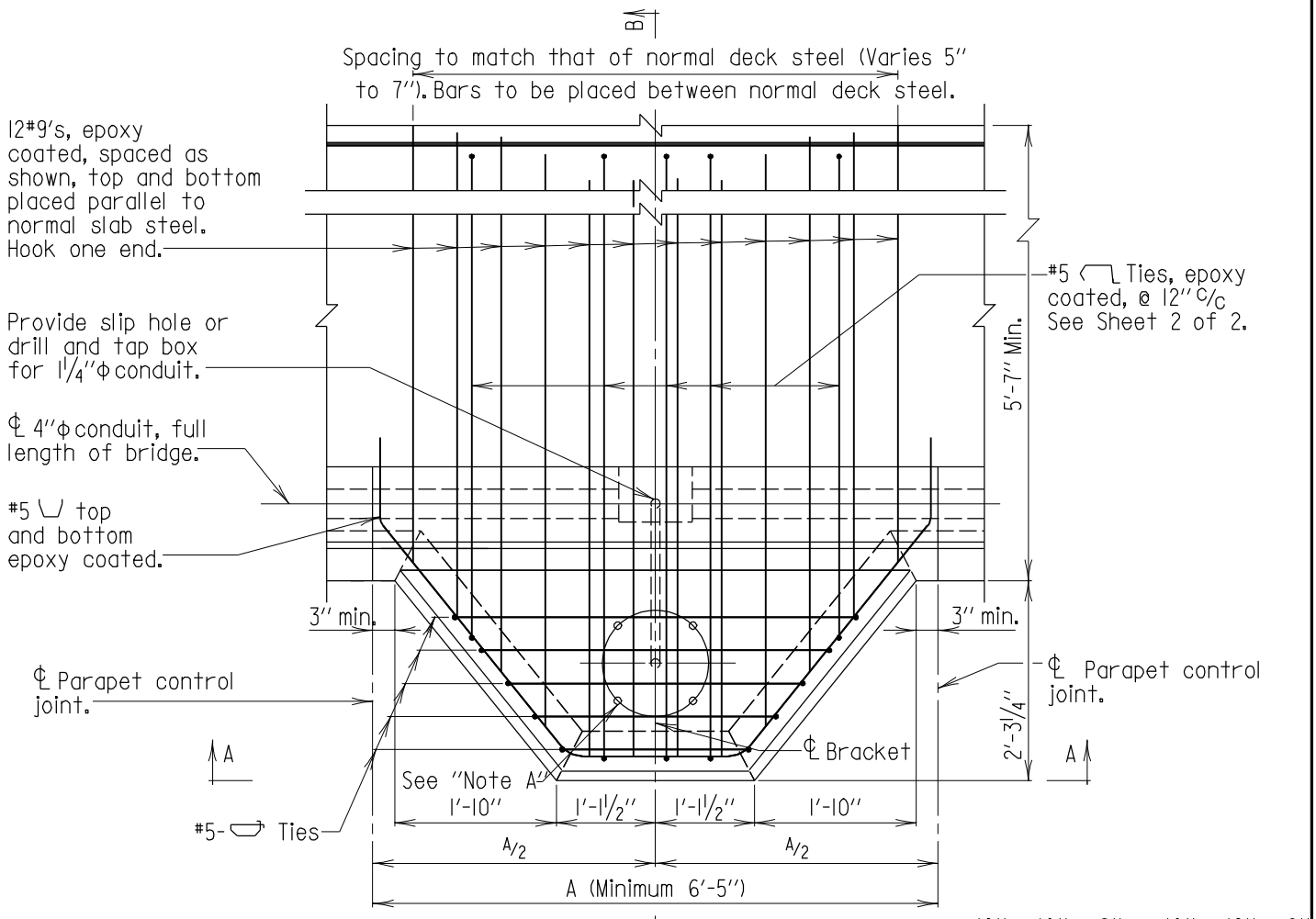
FHWA APPROVAL	
DATE: .	

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

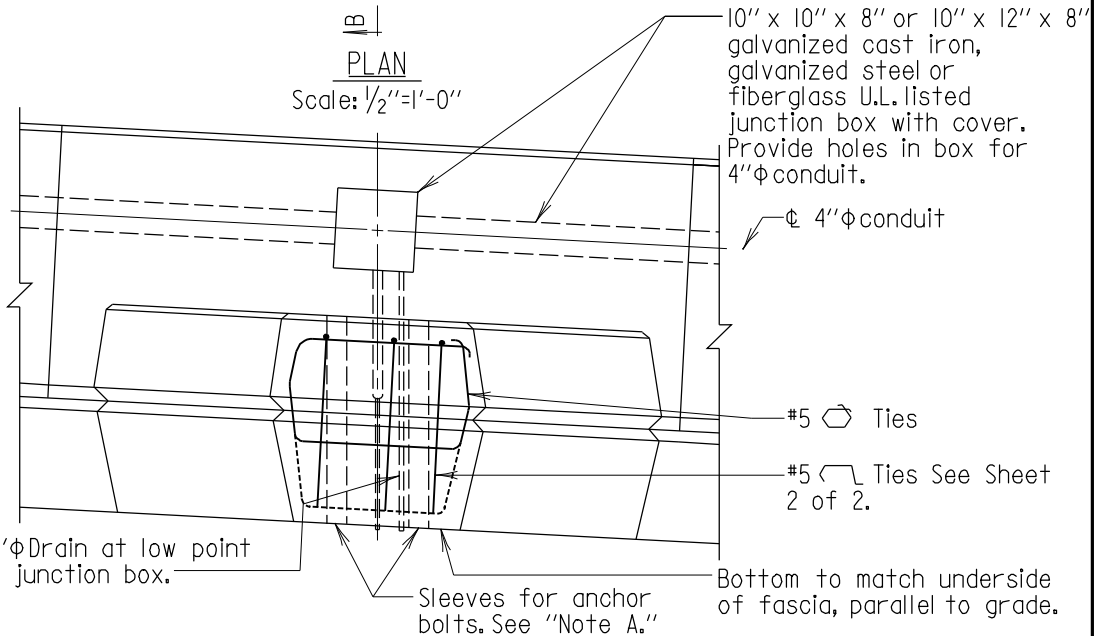
HIGH SIDE OF CROWN (OR SUPERELEVATED)
SECTION OF SIDEWALK AND PARAPET WITH DIAMOND BACK

STANDARD NO. BR-SS(6.26)-03-161 SHEET 2 OF 2

SUPER CONCRETE WORK



Note:
Station for light post support bracket shown on Plans is only approximate.
℄ Bracket to be located midway between parapet control joints.
A= Normal parapet contol joint spacing (Adjust as necessary to meet minimum limitations).



Note:
Normal slab reinforcing steel not shown.
Note A:
Contractor is to contact the District Engineer in writing prior to placing sleeves for anchor bolts, to ascertain the bolt circle dimension and size of anchor bolts that will be used on this project. All light poles to be set plumb using leveling nuts on anchor bolts.
Maximum height of pole for this detail is 40'.

SECTION A-A
Scale: 1/2"=1'-0"

For Section "B-B" see Sheet 2 of 2.

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 11/8/84

REVISIONS	
SHA	FHWA
5-26-92	·
1-8-93	·
9-24-96	·
1-9-08	·

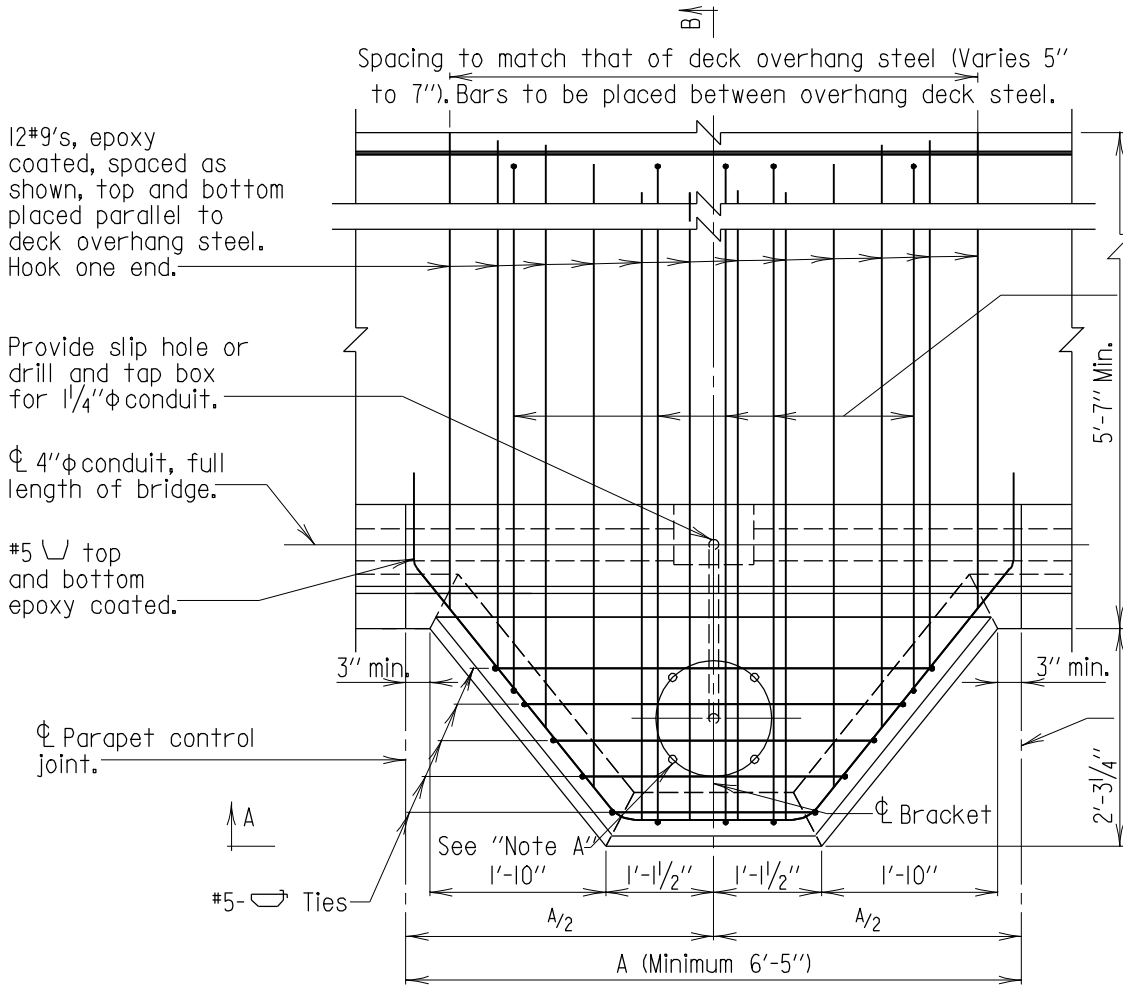
FHWA APPROVAL
DATE: 3-19-85

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

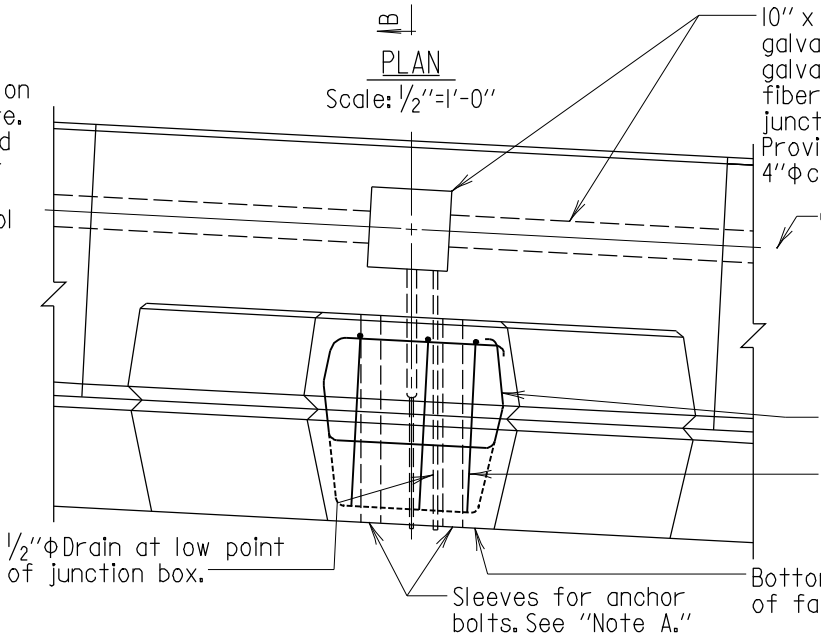
SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST ON SIDEWALK WITH SPECIAL PARAPET

STANDARD NO. BR-SS(6.27)-84-166 SHEET 1 OF 2

SUPER-CONCRETE WORK



Note:
Station for light post support bracket shown on Plans is only approximate.
℄ Bracket to be located midway between parapet control joints.
A= Normal parapet contol joint spacing (Adjust as necessary to meet minimum limitations).



Note:
Deck overhang reinforcing steel not shown.
Note A:
Contractor is to contact the District Engineer in writing prior to placing sleeves for anchor bolts, to ascertain the bolt circle dimension and size of anchor bolts that will be used on this project. All light poles to be set plumb using leveling nuts on anchor bolts.
Maximum height of pole for this detail is 40'.

SECTION A-A
Scale: 1/2"=1'-0"

For Section "B-B" see Sheet 2 of 2.

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 11/8/84

REVISIONS	
SHA	FHWA
1-8-93	·
9-24-96	·
11-26-07	·
1-9-08	·

FHWA APPROVAL
DATE: 3-19-85

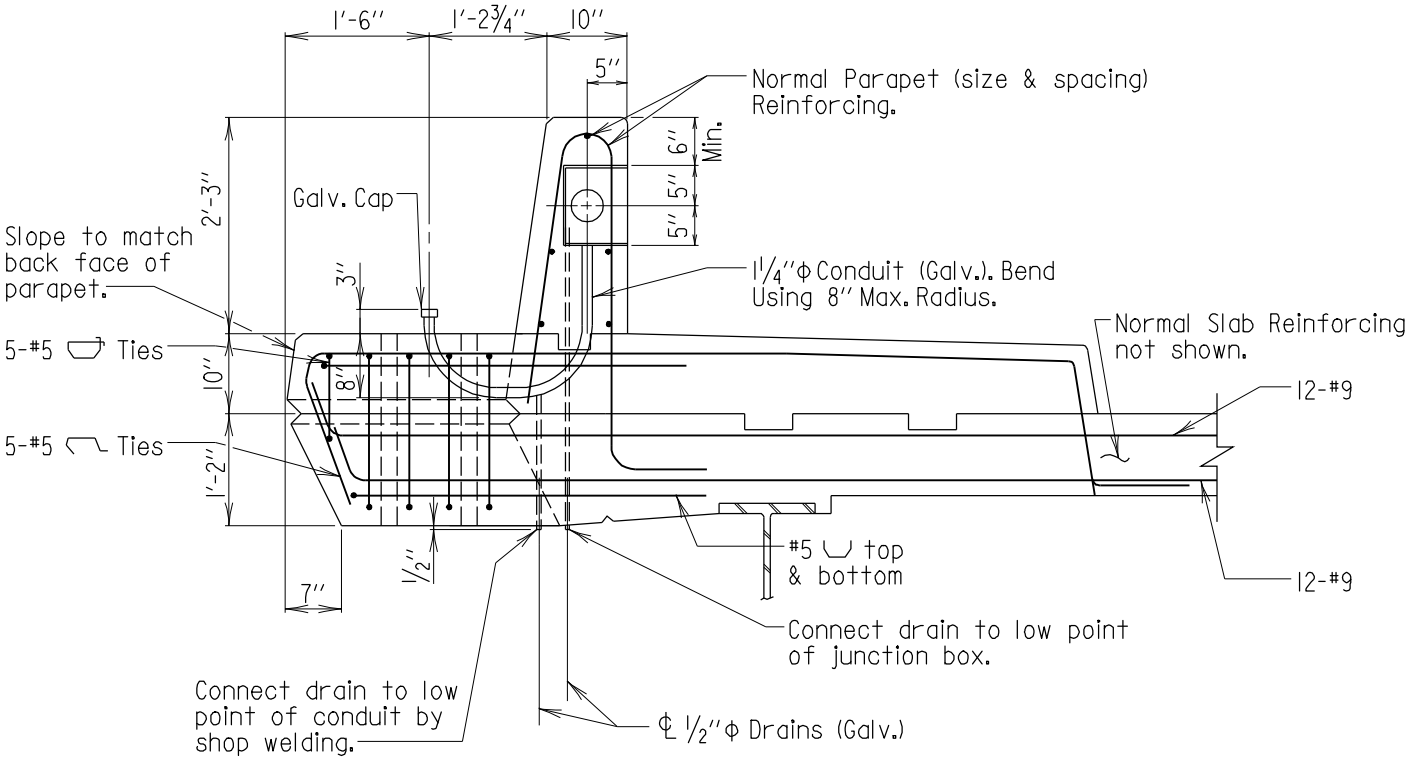
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

VERIFIED 11-26-2007 LRFD

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST ON SIDEWALK WITH SPECIAL PARAPET

STANDARD NO. BR-SS(6.27)-84-166(L) SHEET 1 OF 2

SUPER-CONCRETE WORK



SECTION B-B

Scale: ½"=1'-0"

OTHER RELATED STANDARDS
REBAR-PL(3.03)-91-263
REBAR-BD(3.04)-91-257

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 11/8/84

REVISIONS	
SHA	FHWA
2-14-92	·
2-19-93	·
9-24-96	·
8-7-98	·

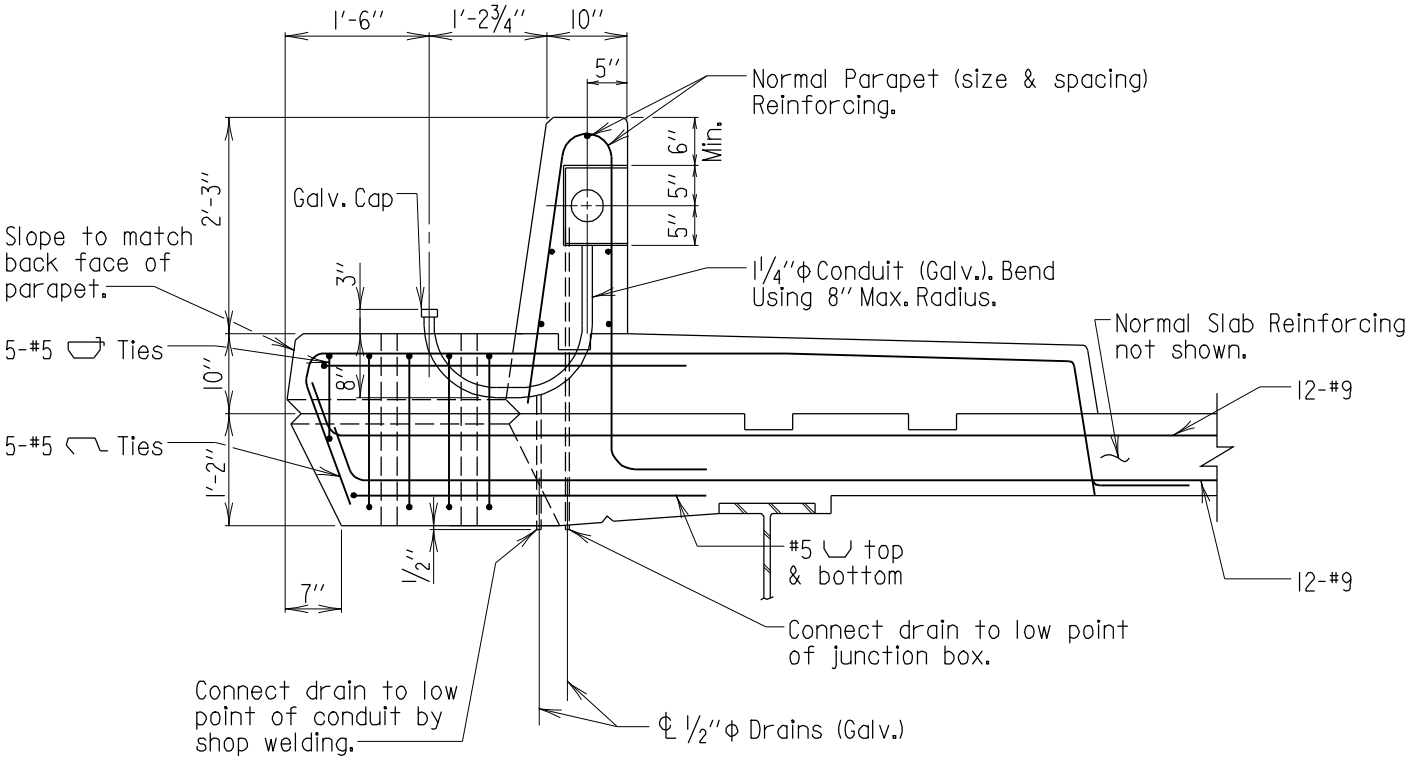
FHWA APPROVAL
DATE: 3-19-85

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST ON SIDEWALK WITH SPECIAL PARAPET

STANDARD NO. BR-SS(6.27)-84-166 SHEET 2 OF 2

SUPER-CONCRETE WORK



SECTION B-B

Scale: ½"=1'-0"

OTHER RELATED STANDARDS
REBAR-PL(3.03)-91-263
REBAR-BD(3.04)-91-257

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 11/8/84

REVISIONS	
SHA	FHWA
2-19-93	·
9-24-96	·
8-7-98	·
11-26-07	·

FHWA APPROVAL
DATE: .

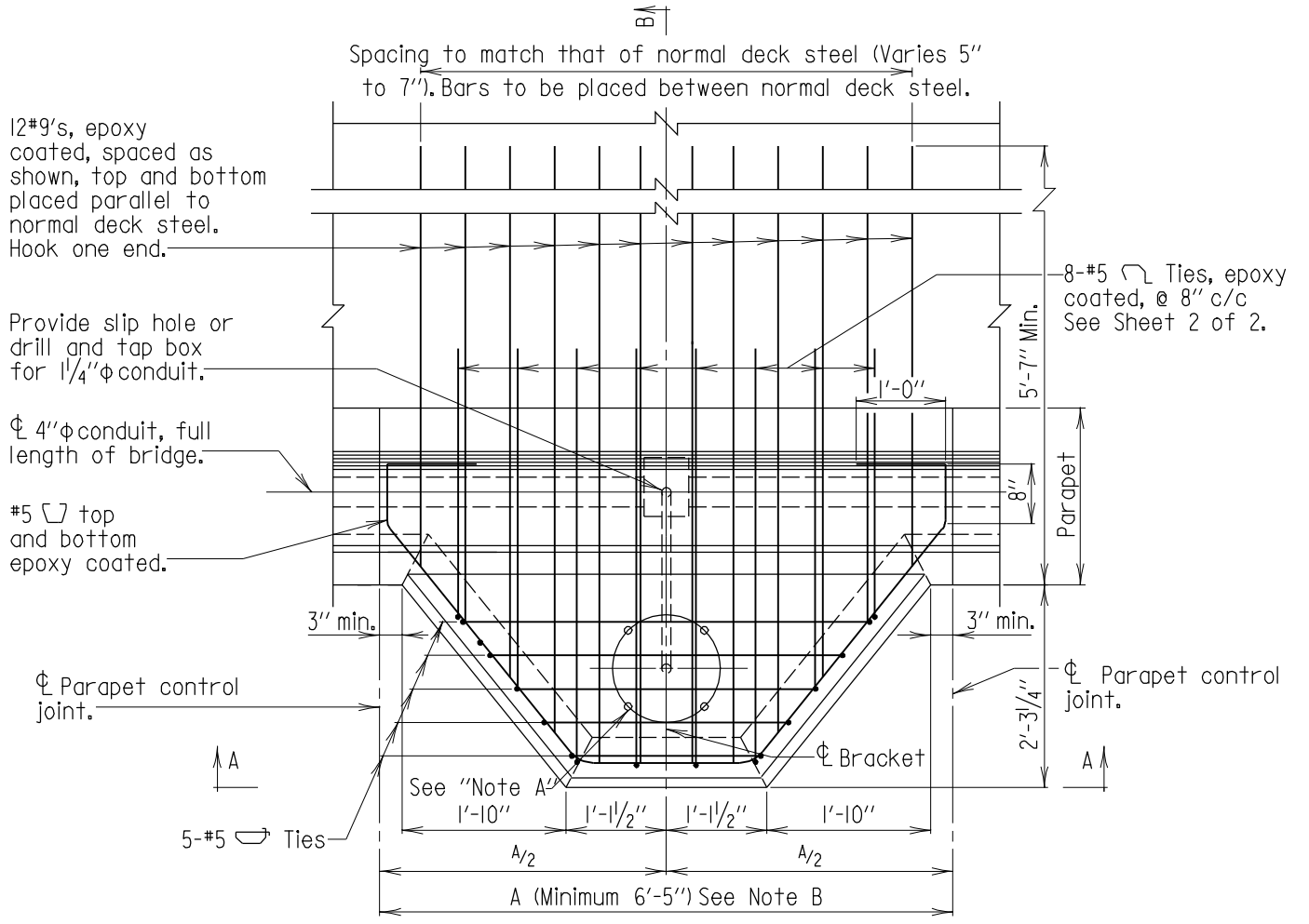
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

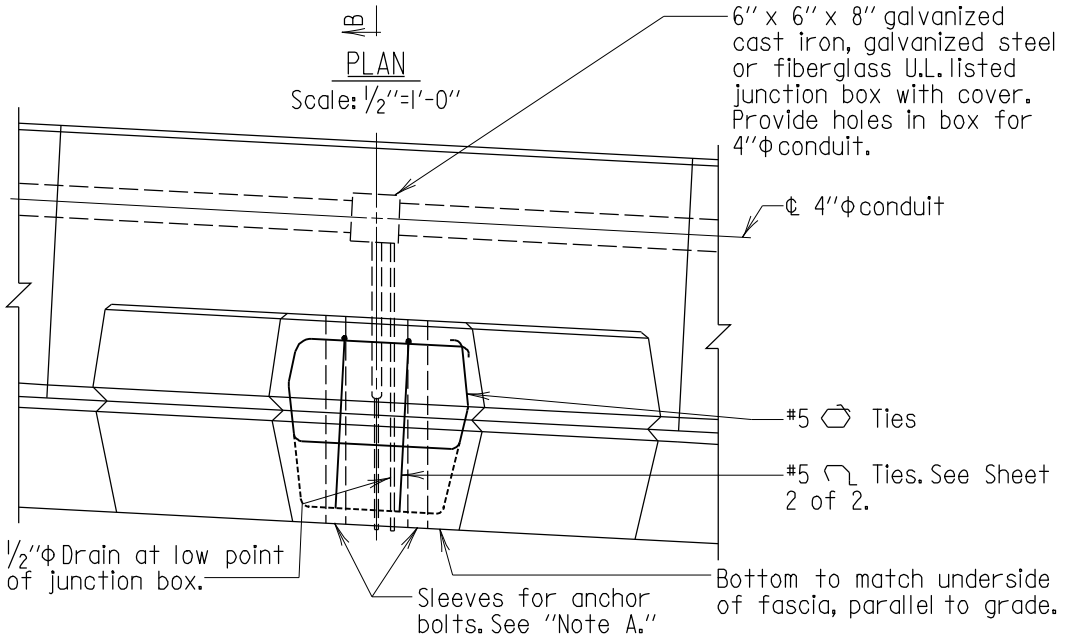
VERIFIED 11-26-2007 LRFD

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST ON SIDEWALK WITH SPECIAL PARAPET

STANDARD NO. BR-SS(6.27)-84-166(L) SHEET 2 OF 2

SUPER-CONCRETE WORK





Note B:
Station for light post support bracket shown on Plans is only approximate. ℄ Bracket to be located midway between parapet control joints.
A= Normal parapet contol joint spacing (Adjust as necessary to meet minimum limitations).
If a light post is placed at ℄ of pier, eliminate the control joint at the ℄ of pier, The first control joint beyond, on one side only shall be changed to a paraffin joint.

Note:
Normal deck reinforcing steel not shown.

Note A:
Contractor is to contact the District Engineer in writing prior to placing sleeves for anchor bolts, to ascertain the bolt circle dimension and size of anchor bolts that will be used on this project. All light poles to be set plumb using leveling nuts on anchor bolts. Max. height of pole for this detail is 40'.

SECTION A-A
Scale: 1/2"=1'-0"

For Section "B-B" see Sheet 2 of 2.

34'' DIAMOND BACK

APPROVAL
E S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 4/8/84

REVISIONS	
SHA	FHWA
1-8-93	·
9-24-96	·
6-1-05	·
1-9-08	·

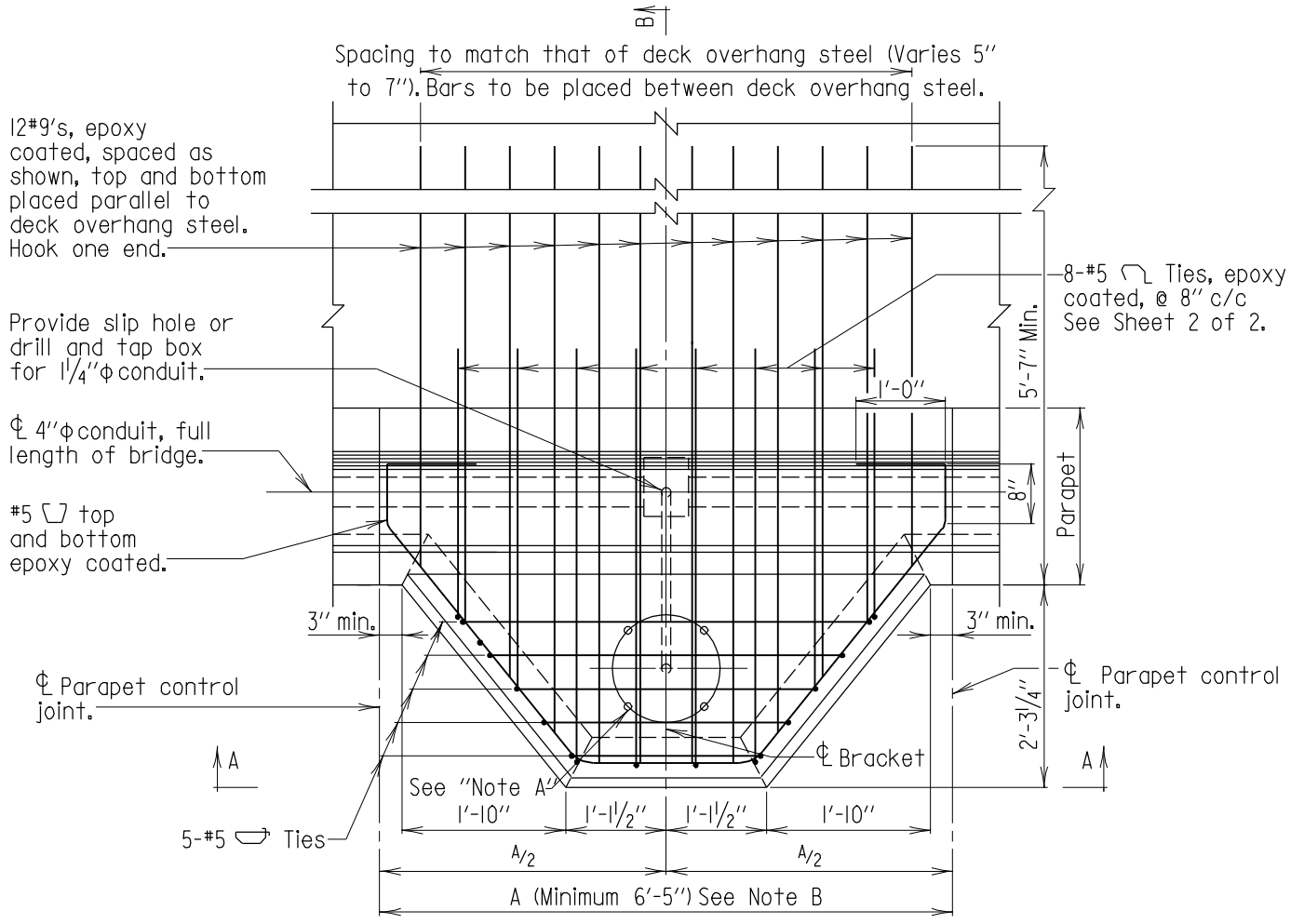
FHWA APPROVAL
DATE: 3-19-85

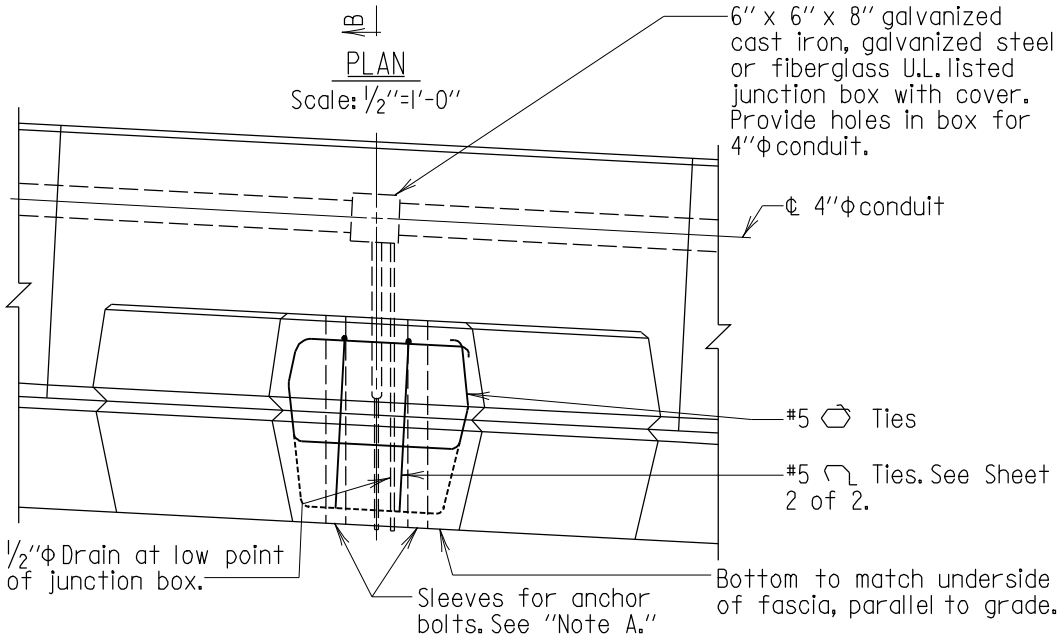
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH SINGLE CONDUIT AND 34" F-SHAPE PARAPET WITH DIAMOND BACK

STANDARD NO. BR-SS(6.28)-05-167A SHEET 1 OF 2

SUPER-CONCRETE WORK





Note B:
Station for light post support bracket shown on Plans is only approximate. ℄ Bracket to be located midway between parapet control joints.
A= Normal parapet contol joint spacing (Adjust as necessary to meet minimum limitations).
If a light post is placed at ℄ of pier, eliminate the control joint at the ℄ of pier, The first control joint beyond, on one side only shall be changed to a paraffin joint.

Note:
Deck overhang reinforcing steel not shown.

Note A:
Contractor is to contact the District Engineer in writing prior to placing sleeves for anchor bolts, to ascertain the bolt circle dimension and size of anchor bolts that will be used on this project. All light poles to be set plumb using leveling nuts on anchor bolts. Max. height of pole for this detail is 40'.

SECTION A-A
Scale: 1/2"=1'-0"

For Section "B-B" see Sheet 2 of 2.

34" DIAMOND BACK

APPROVAL
E S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 4/8/84

REVISIONS	
SHA	FHWA
9-24-96	·
6-1-05	·
11-26-07	·
1-9-08	·

FHWA APPROVAL
DATE: 3-19-85

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

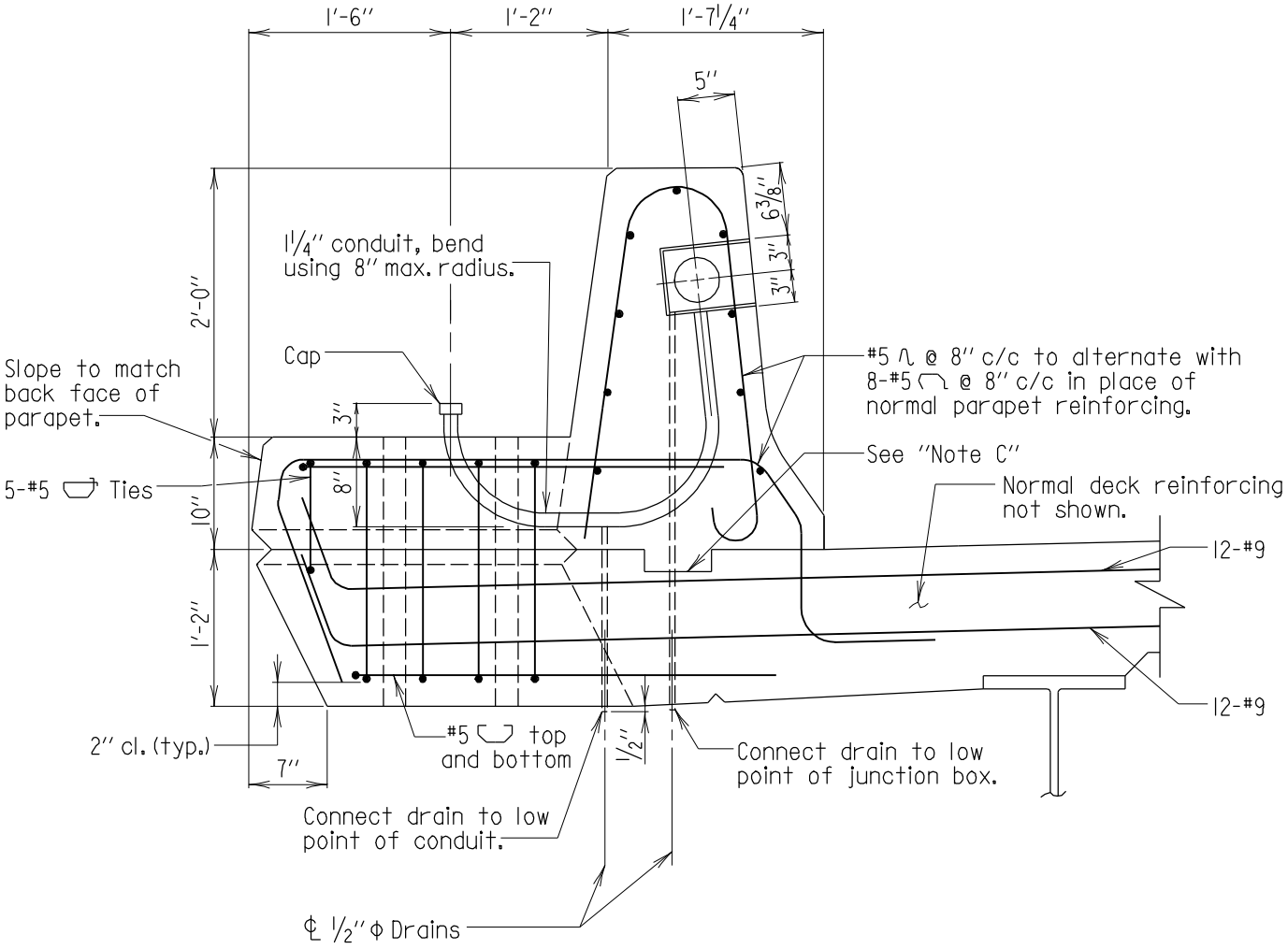
VERIFIED 11-26-2007 LRFD

SUPER-CONCRETE WORK

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH SINGLE CONDUIT AND 34" F-SHAPE PARAPET WITH DIAMOND BACK

STANDARD NO. BR-SS(6.28)-05-167A(L) SHEET 1 OF 2

Note:
Conduit, drain tubes and cap may be galvanized steel or PVC.



SECTION B-B
Scale: 3/4"=1'-0"

Note:
All longitudinal bars are #5's and shall be placed continuously in the parapet from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multispan bridge. Refer to BR-SS(6.25)-03-159A.

Note C:
The constr. jt. between the F-shape parapet and the deck may vary slightly from the joint indicated. For exact details and location of the joint see "Superstructure" Sheet.

34'' DIAMOND BACK

APPROVAL
C.S. Friedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 11/8/84

REVISIONS	
SHA	FHWA
8-5-92	·
1-8-93	·
9-24-96	·
6-1-05	·

FHWA APPROVAL
DATE: 3-19-85

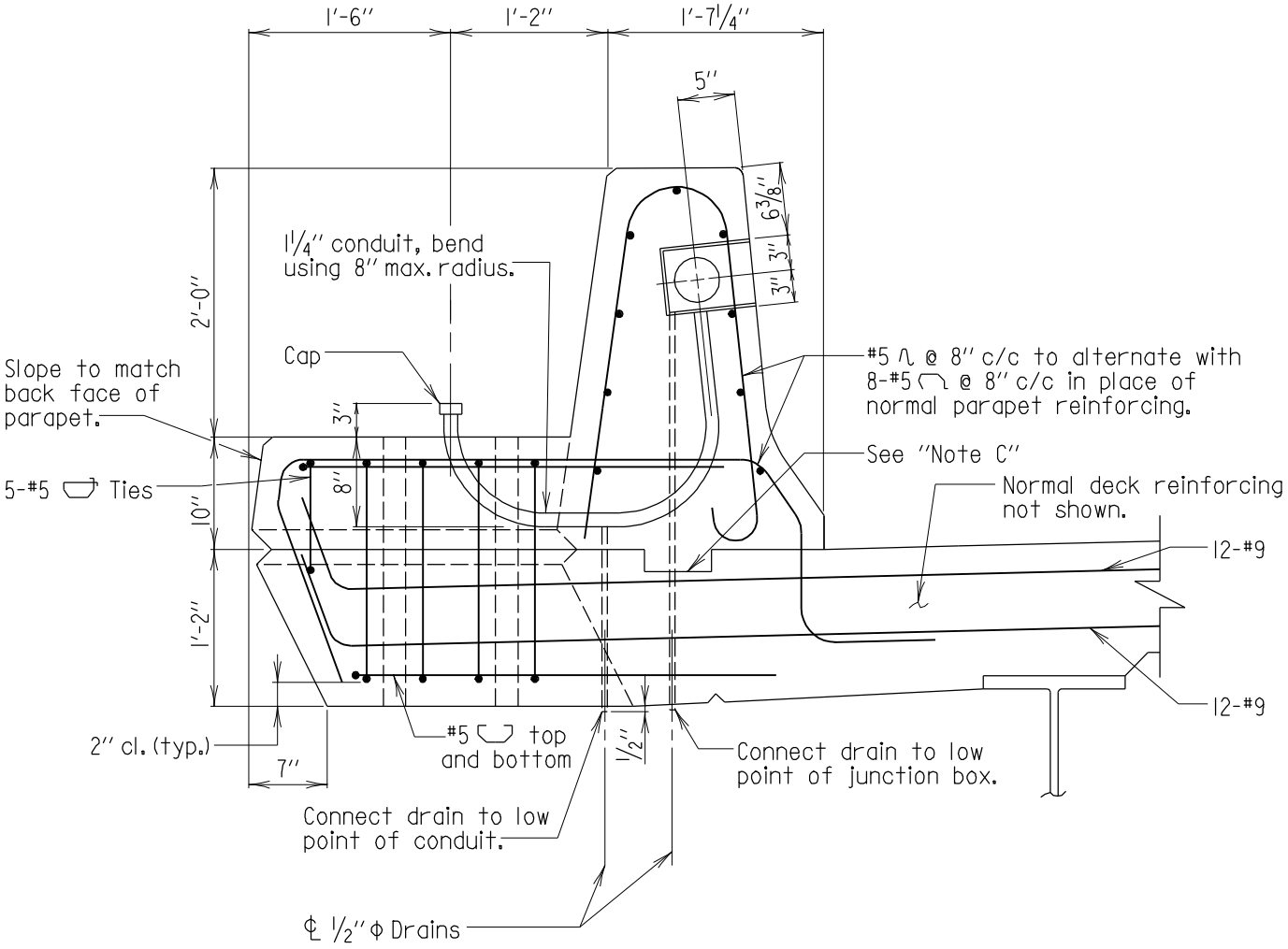
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH SINGLE CONDUIT AND 34" F-SHAPE PARAPET WITH DIAMOND BACK

STANDARD NO. BR-SS(6.28)-05-167A SHEET 2 OF 2

SUPER-CONCRETE WORK

Note:
Conduit, drain tubes and cap may be galvanized steel or PVC.



SECTION B-B
Scale: 3/4"=1'-0"

Note:
All longitudinal bars are #5's and shall be placed continuously in the parapet from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multispan bridge. Refer to BR-SS(6.25)-03-159A.

Note C:
The constr. jt. between the F-shape parapet and the deck may vary slightly from the joint indicated. For exact details and location of the joint see "Superstructure" Sheet.

34" DIAMOND BACK

APPROVAL
E S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 11/8/84

REVISIONS	
SHA	FHWA
1-8-93	·
9-24-96	·
6-1-05	·
11-26-07	·

FHWA APPROVAL
DATE: 3-19-85

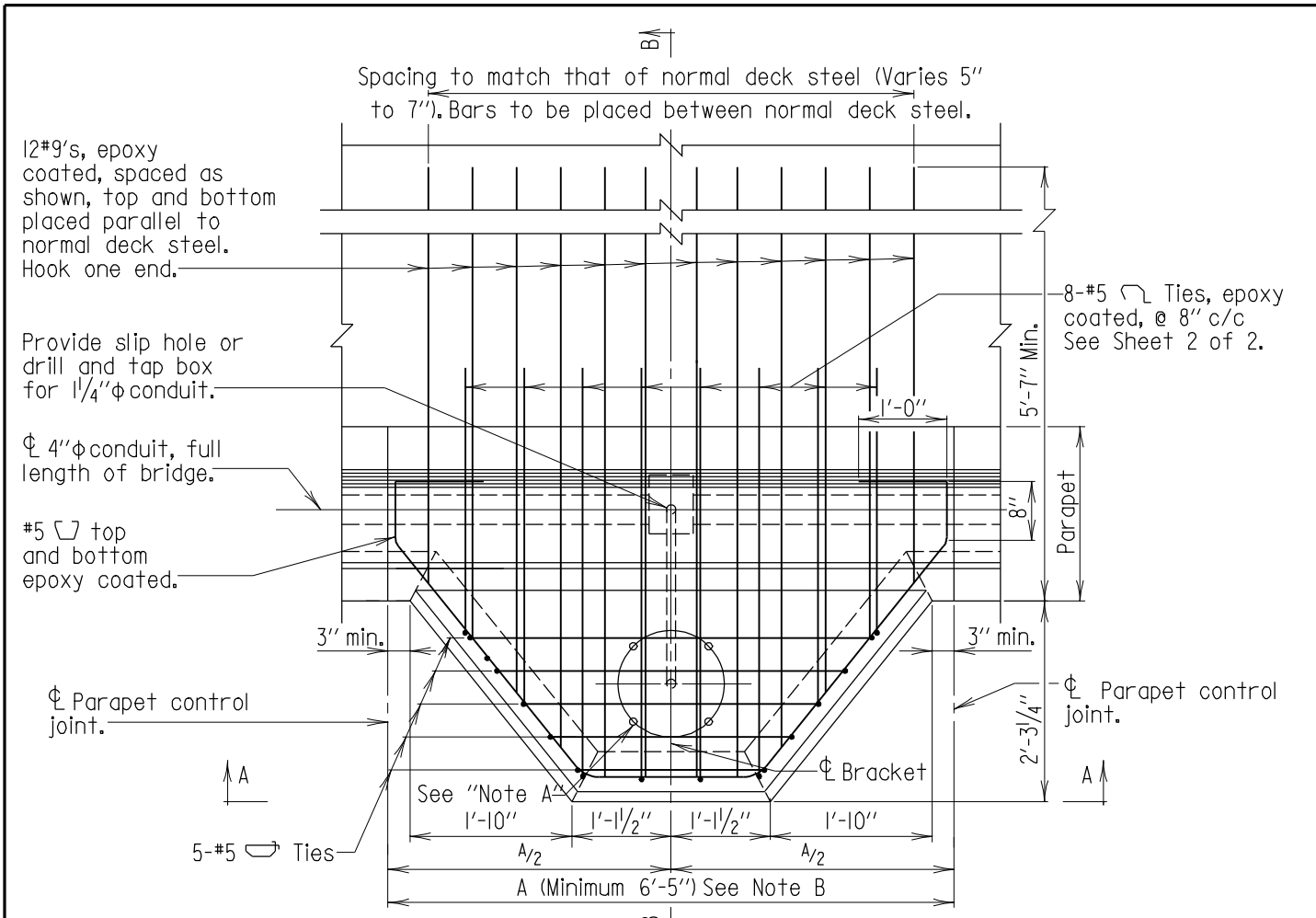
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

VERIFIED 11-26-2007 LRFD

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH SINGLE CONDUIT AND 34" F-SHAPE PARAPET WITH DIAMOND BACK

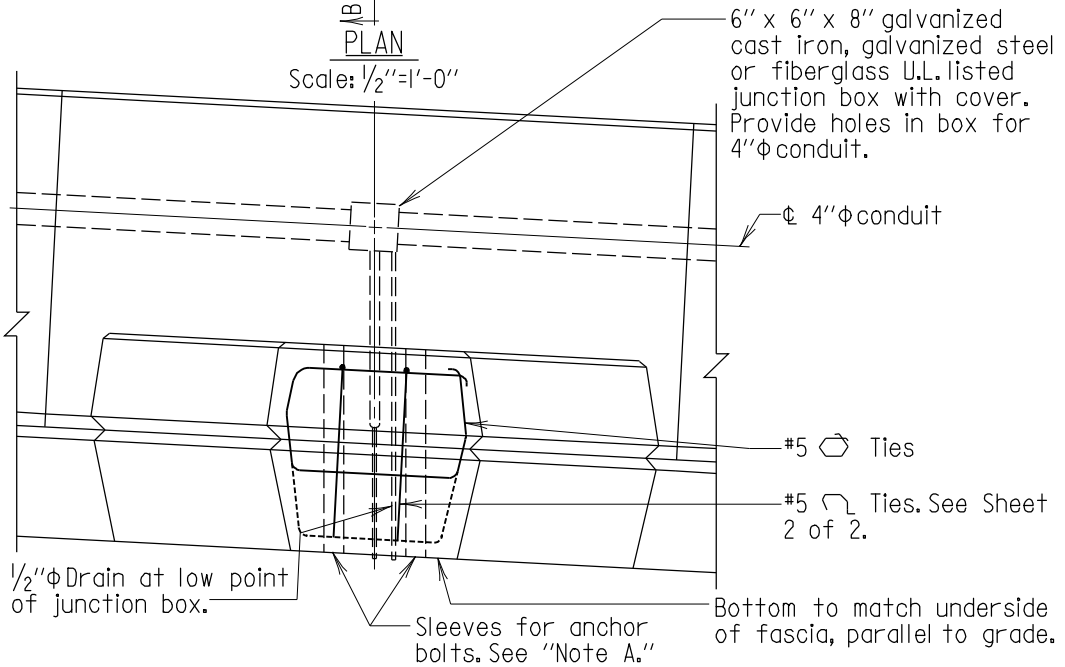
STANDARD NO. BR-SS(6.28)-05-167A(L) SHEET 2 OF 2

SUPER-CONCRETE WORK



PLAN

Scale: 1/2"=1'-0"



Note B:
Station for light post support bracket shown on Plans is only approximate. ℄ Bracket to be located midway between parapet control joints.
A= Normal parapet contol joint spacing (Adjust as necessary to meet minimum limitations).
If a light post is placed at ℄ of pier, eliminate the control joint at the ℄ of pier, The first control joint beyond, on one side only shall be changed to a paraffin joint.

Note:
Normal deck reinforcing steel not shown.

Note A:
Contractor is to contact the District Engineer in writing prior to placing sleeves for anchor bolts, to ascertain the bolt circle dimension and size of anchor bolts that will be used on this project. All light poles to be set plumb using leveling nuts on anchor bolts. Max. height of pole for this detail is 40'.

SECTION A-A

Scale: 1/2"=1'-0"

For Section "B-B" see Sheet 2 of 2.

42'' DIAMOND BACK

APPROVAL
C S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
1-9-08	·
·	·
·	·
·	·

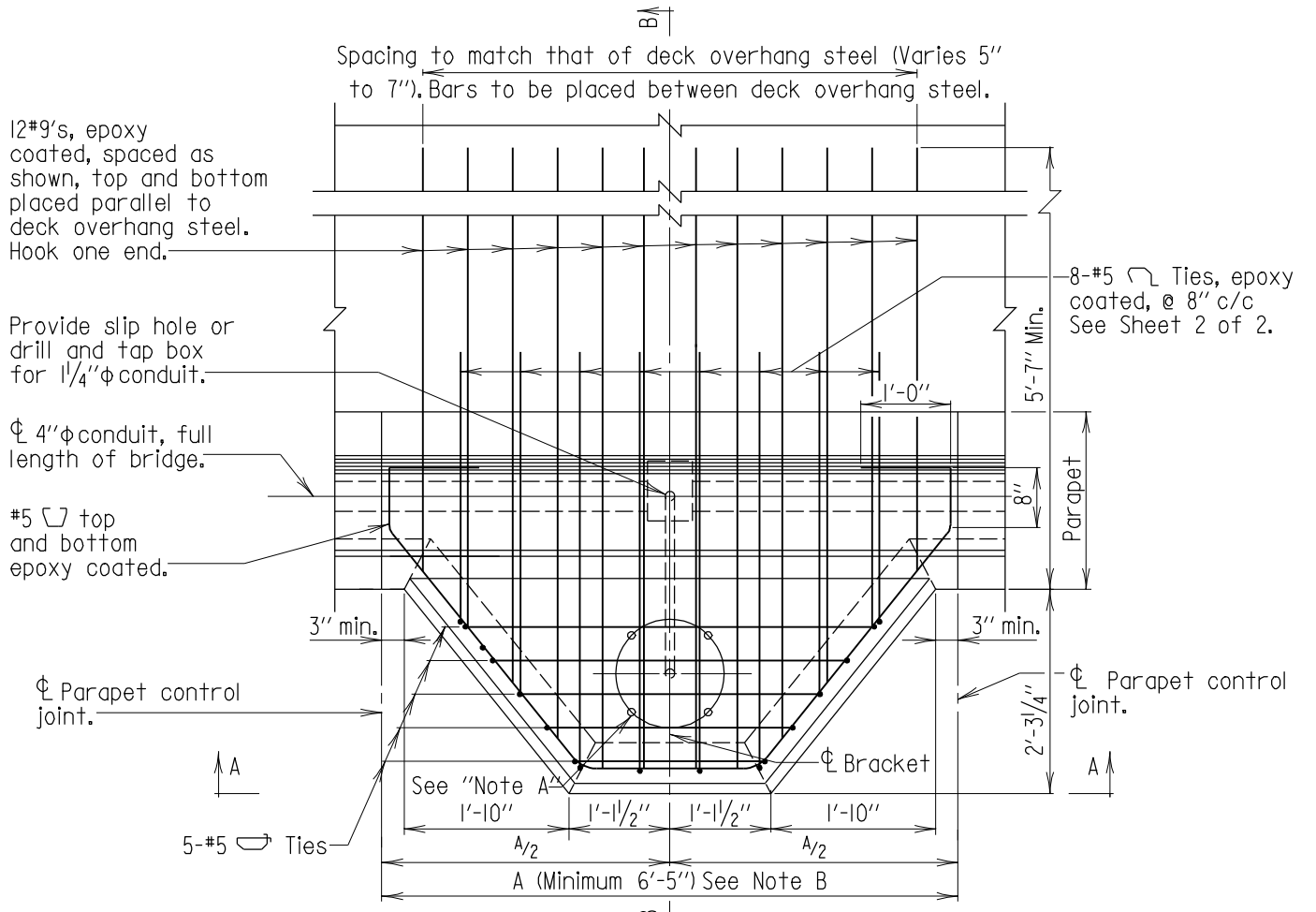
FHWA APPROVAL
DATE: .

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

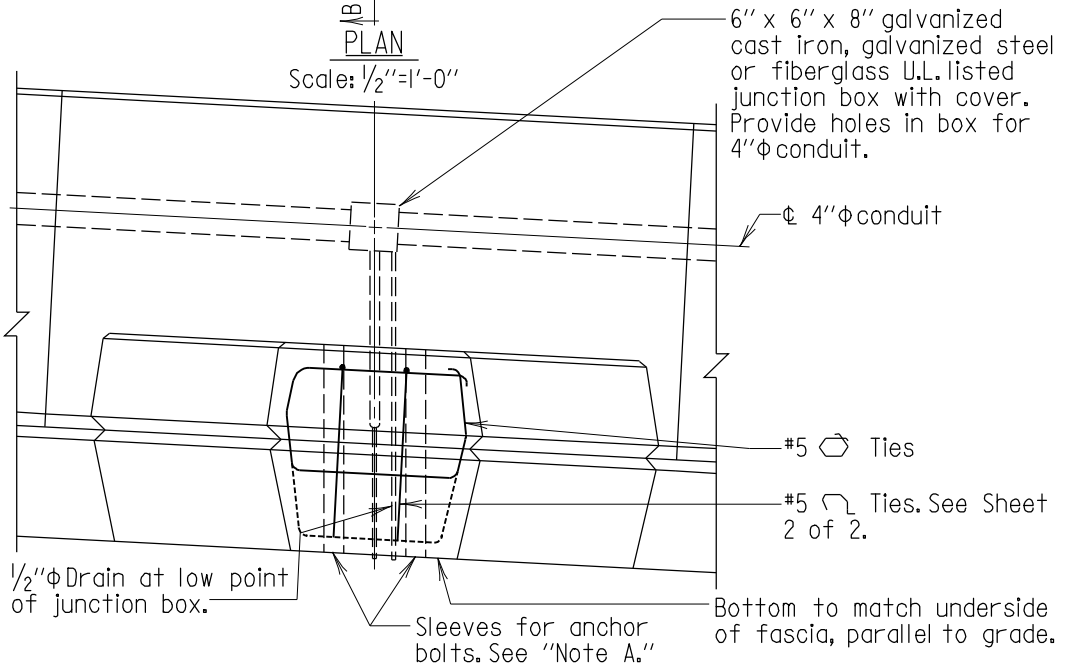
SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH SINGLE CONDUIT AND 42'' F-SHAPE PARAPET WITH DIAMOND BACK

STANDARD NO. BR-SS(6.28)-05-167B SHEET 1 OF 2

SUPER-CONCRETE WORK



PLAN
Scale: 1/2"=1'-0"



Note B:
Station for light post support bracket shown on Plans is only approximate. ℄ Bracket to be located midway between parapet control joints.
A= Normal parapet contol joint spacing (Adjust as necessary to meet minimum limitations).
If a light post is placed at ℄ of pier, eliminate the control joint at the ℄ of pier, The first control joint beyond, on one side only shall be changed to a paraffin joint.

Note:
Deck overhang reinforcing steel not shown.

Note A:
Contractor is to contact the District Engineer in writing prior to placing sleeves for anchor bolts, to ascertain the bolt circle dimension and size of anchor bolts that will be used on this project. All light poles to be set plumb using leveling nuts on anchor bolts. Max. height of pole for this detail is 40'.

SECTION A-A
Scale: 1/2"=1'-0"

For Section "B-B" see Sheet 2 of 2.

42'' DIAMOND BACK

APPROVAL
C S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
11-26-07	·
1-9-08	·
·	·
·	·

FHWA APPROVAL
DATE: .

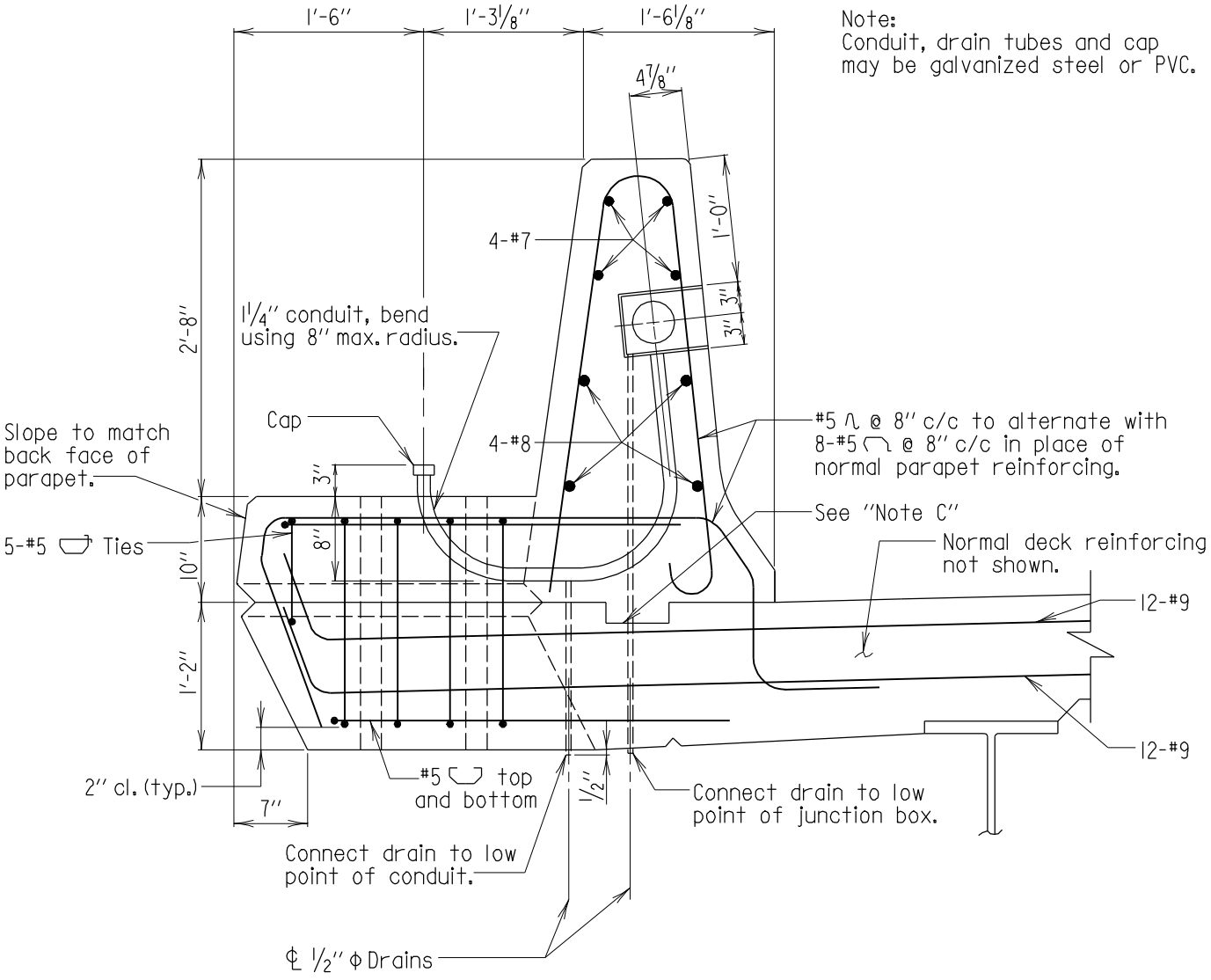
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

VERIFIED 11-26-2007 LRFD

SUPPER-CONCRETE WORK

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH SINGLE CONDUIT AND 42'' F-SHAPE PARAPET WITH DIAMOND BACK

STANDARD NO. BR-SS(6.28)-05-167B(L) SHEET 1 OF 2



SECTION B-B

Scale: 3/4"=1'-0"

Note:
Conduit, drain tubes and cap may be galvanized steel or PVC.

Note:
All #7 and #8 bars shall be placed continuously in the parapet from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multispan bridge. Refer to BR-SS(6.25)-03-159B.

Note C:
The constr. jt. between the F-shape parapet and the deck may vary slightly from the joint indicated. For exact details and location of the joint see "Superstructure" Sheet.

42'' DIAMOND BACK

APPROVAL
E S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
.	.
.	.
.	.
.	.

FHWA APPROVAL
DATE: .

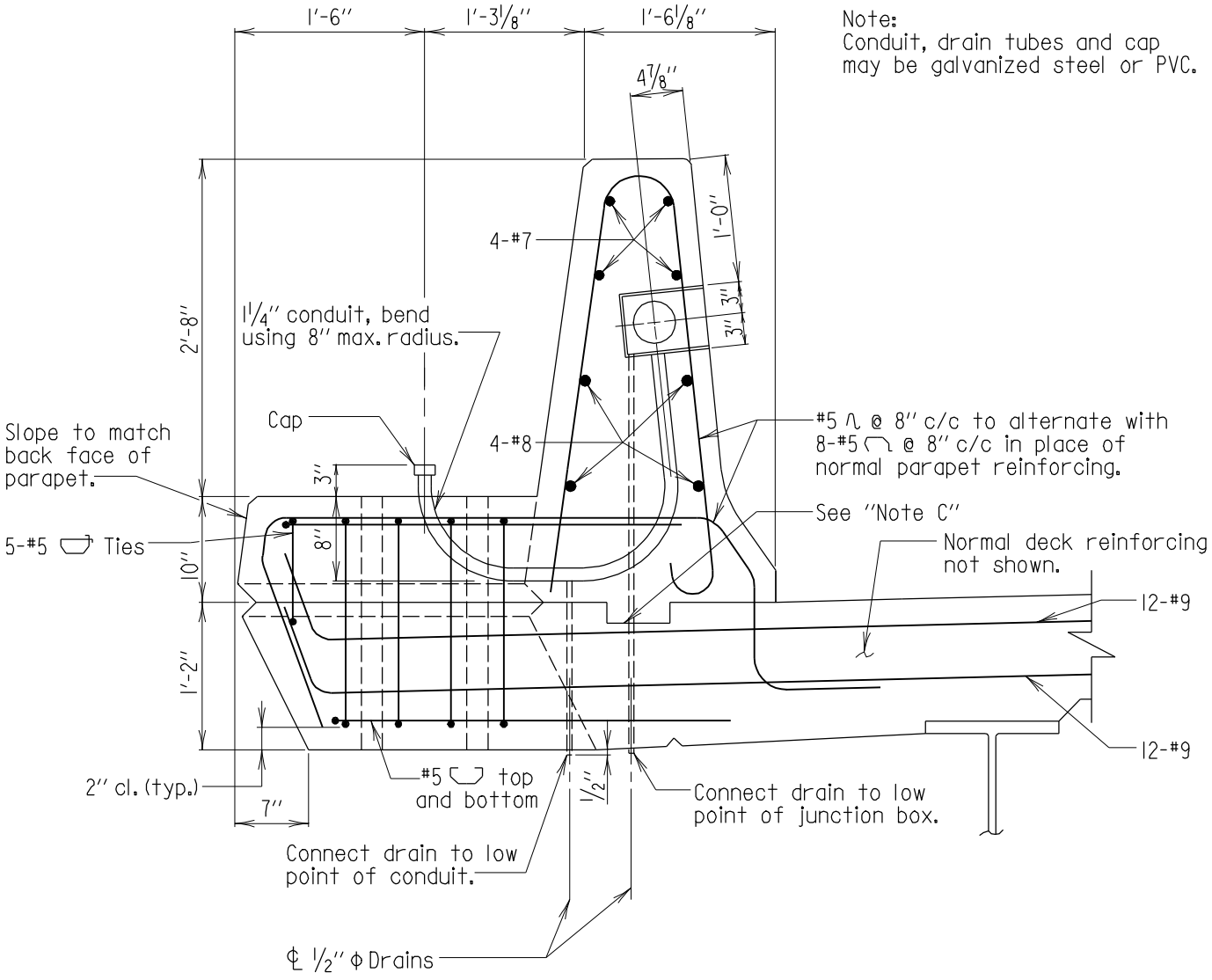
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH SINGLE CONDUIT AND 42" F-SHAPE PARAPET WITH DIAMOND BACK

STANDARD NO. BR-SS(6.28)-05-167B

SHEET 2 OF 2

SUPER-CONCRETE WORK



Note:
Conduit, drain tubes and cap may be galvanized steel or PVC.

SECTION B-B
Scale: 3/4"=1'-0"

Note:
All #7 and #8 bars shall be placed continuously in the parapet from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multispan bridge. Refer to BR-SS(6.25)-03-159B.

Note C:
The constr. jt. between the F-shape parapet and the deck may vary slightly from the joint indicated. For exact details and location of the joint see "Superstructure" Sheet.

42'' DIAMOND BACK

APPROVAL
C.S. Friedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
11-26-07	·
·	·
·	·
·	·

FHWA APPROVAL
DATE: .

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

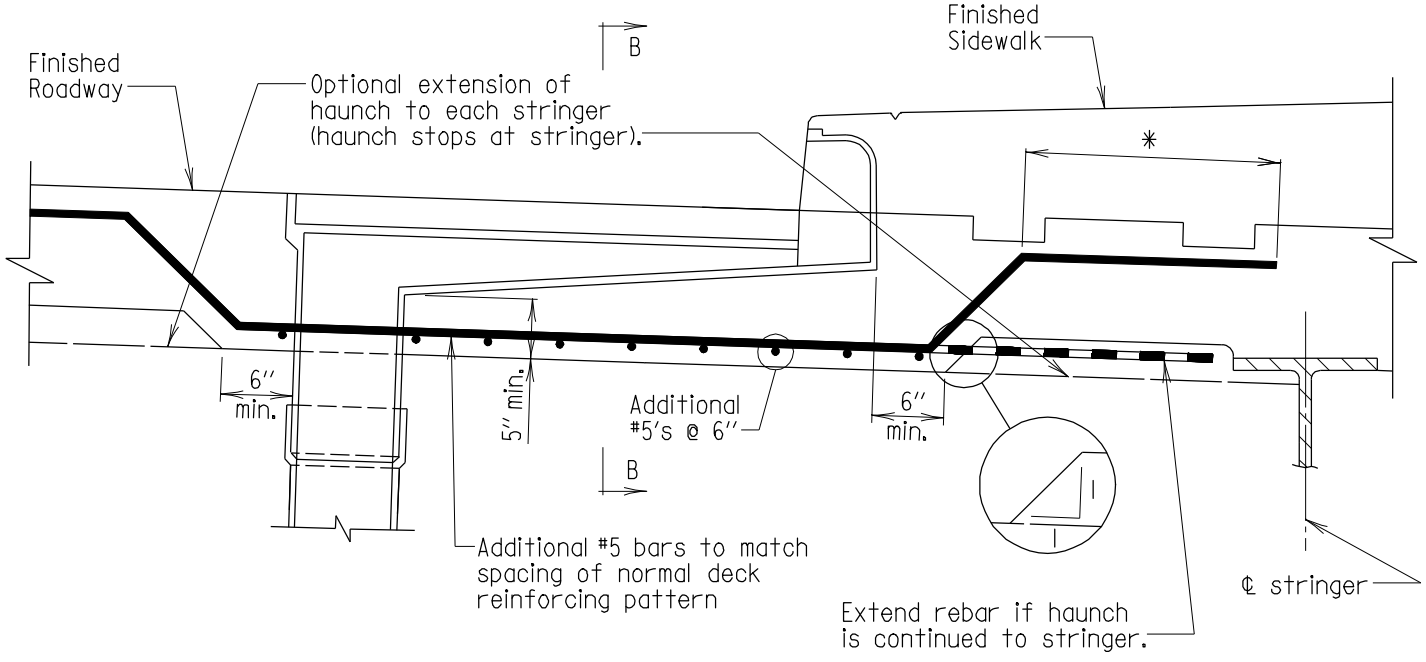
VERIFIED 11-26-2007 LRFD

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH SINGLE CONDUIT AND 42'' F-SHAPE PARAPET WITH DIAMOND BACK

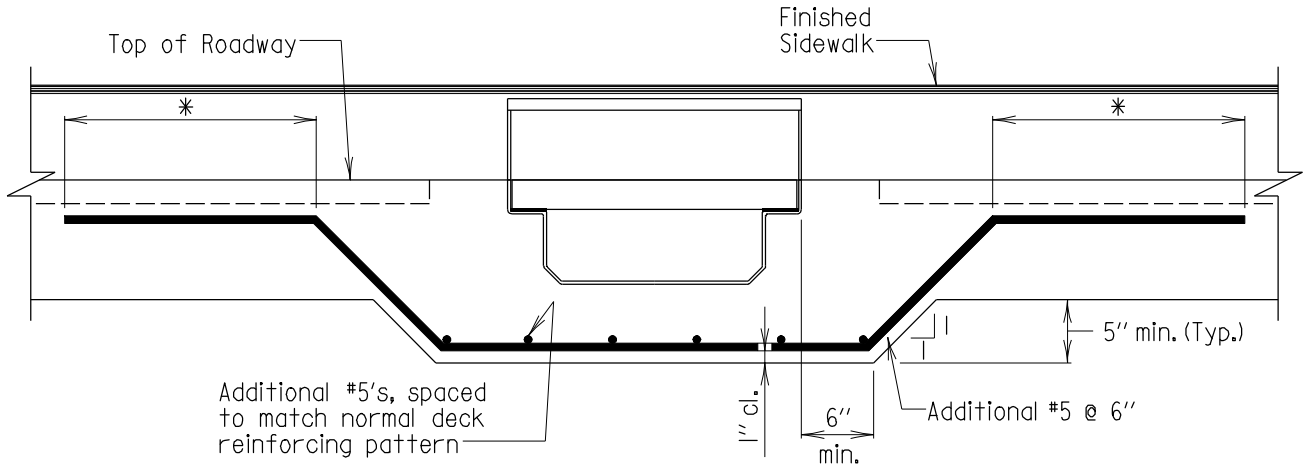
STANDARD NO. BR-SS(6.28)-05-167B(L) SHEET 2 OF 2

SUPER-CONCRETE WORK

* - See appropriate Lap Chart.



SECTION
Scale: 3/4" = 1'-0"



SECTION B-B
Scale: 3/4" = 1'-0"

Notes:
1. Normal deck reinforcing not shown for clarity.
2. Wood forms may be used in the area of the scupper as approved by the Engineer.
3. Type I scupper shown.

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 8/7/98

REVISIONS	
SHA	FHWA
10-22-03	·
·	·
·	·
·	·

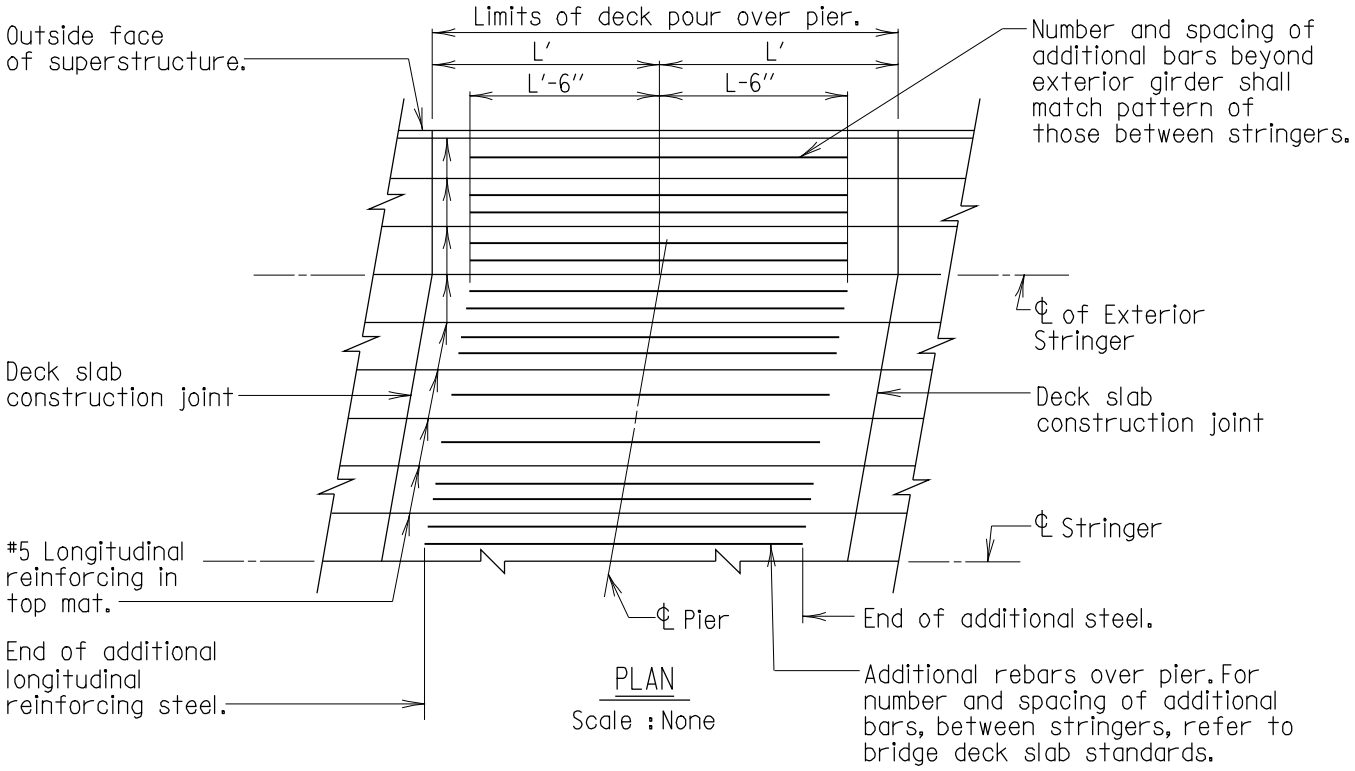
FHWA APPROVAL	
DATE:	·

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

BRIDGE DECK REINFORCEMENT PATTERN IN SCUPPER AREA FOR SCUPPER TYPES I, IA, IV AND V AT SIDEWALK

STANDARD NO. BR-SS(6.29)-85-171 SHEET 1 OF 1

SUPER CONCRETE WORK



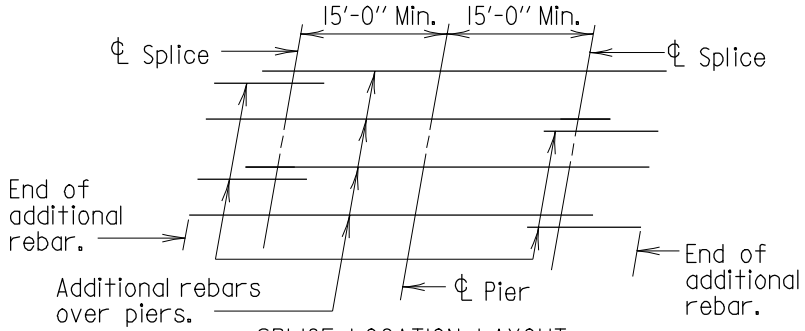
PLAN

Scale : None

Bridge # _____ Description: _____

Location	L' (Back Stationing Span)	L (Ahead Stationing Span)	Bar Size *
Pier _____			
Pier _____			
Pier _____			
Pier _____			
Pier _____			
Pier _____			

*All bars to be #5 unless otherwise noted in this column.



SPLICE LOCATION LAYOUT

Note:
1. If additional longitudinal reinforcing in pour requires splicing, then the reinforcing shall be spliced as per Splice Location Layout.

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 3/31/88

REVISIONS	
SHA	FHWA
7-6-88	6-8-90
3-16-89	6-8-90

FHWA APPROVAL		
DATE: 6-8-90		

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

ADDITIONAL LONGITUDINAL REINFORCING IN TOP OF CONTINUOUS DECK SLABS OVER PIERS

STANDARD NO. BR-SS(6.30)-88-195 SHEET 1 OF 1

SUPER CONCRETE WORK

GENERAL NOTES

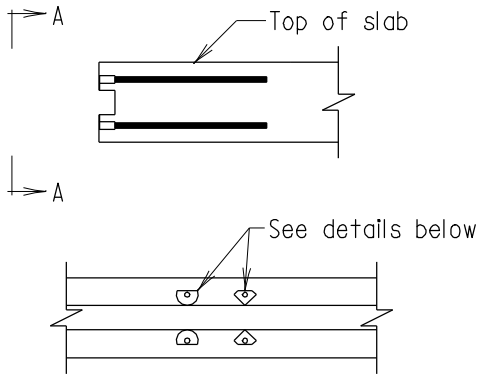
1. Longitudinal deck reinforcing steel not shown.
2. Existing slab shown dashed.
3. Splicer bars and normal transverse reinforcing steel to be placed in same horizontal plane.
4. These splice bars will not be measured for payment, but all costs thereof shall be included in the Contract lump sum price for the pertinent Epoxy Coated Reinforcing Steel items.

5a. Root diameter of threaded portion of splicer bar must be equal to nominal diameter of designed bar. Increasing bar diameter to next size is permissable to maintain this requirement.

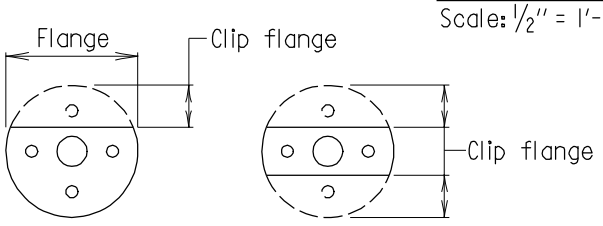
5b. In no case shall the splicer rebar coupler flange encroach into the slab top or bottom concrete cover. Either no flange or clipping the top and bottom edges of the flange prior to application of the epoxy coating in the shop is permissable. (See details below)

6. *FOR OFFICE USE ONLY*
This detail is intended for use on stage construction where the gap between stages of construction does not accomodate the minimum bar lap lengths.

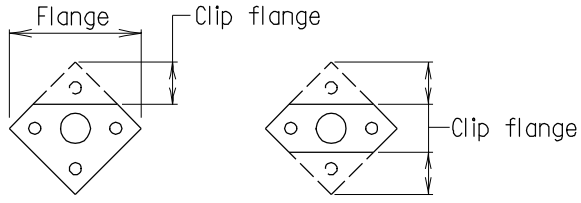
Certification: The steel manufacturer shall furnish certification with actual test results for each heat of steel, showing that the material conforms to these Specifications.



SECTION A-A
Scale: 1/2" = 1'-0"



FRONT VIEW ROUND FLANGE
Scale: None



FRONT VIEW SQUARE FLANGE
Scale: None

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 7/20/88

REVISIONS	
SHA	FHWA
2-28-89	6-8-90
11-15-95	·
9-24-96	·
·	·

FHWA APPROVAL
DATE: 6-8-90

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

SPLICING OF BRIDGE DECK SLAB REINFORCING STEEL DURING STAGE CONSTRUCTION (NO AREA AVAILABLE FOR LAPPING)

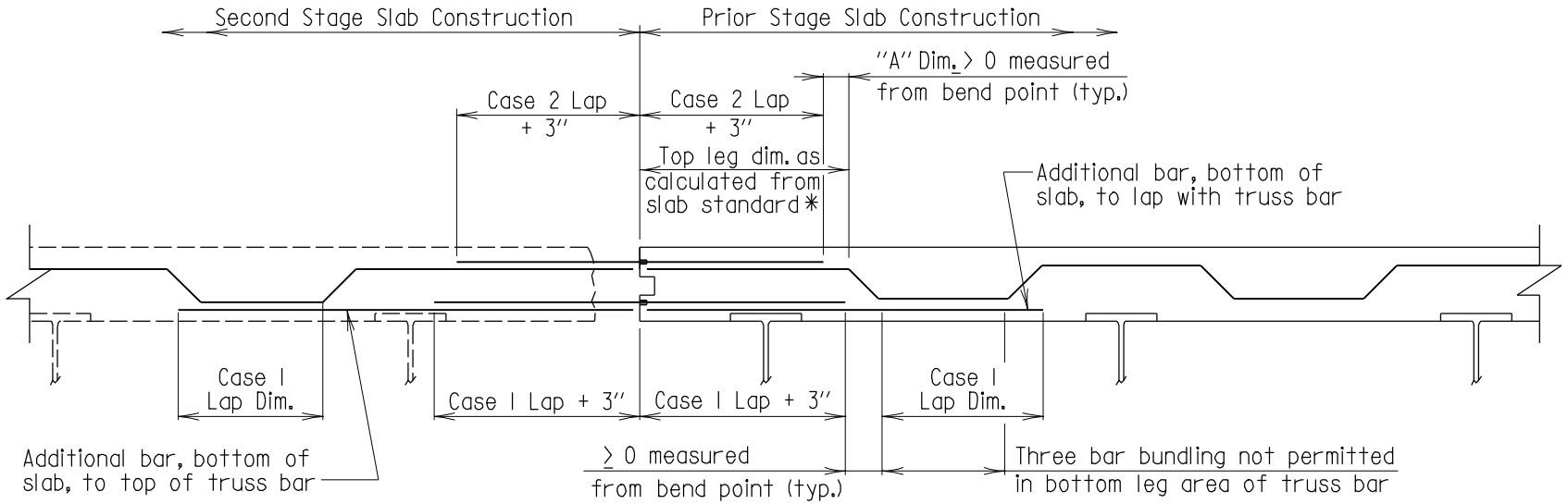
STANDARD NO. BR-SS(6.31)-88-199

SHEET 1 OF 4

SUPER CONCRETE WORK

Other Related Standards
BR-SS(6.42)-95-311

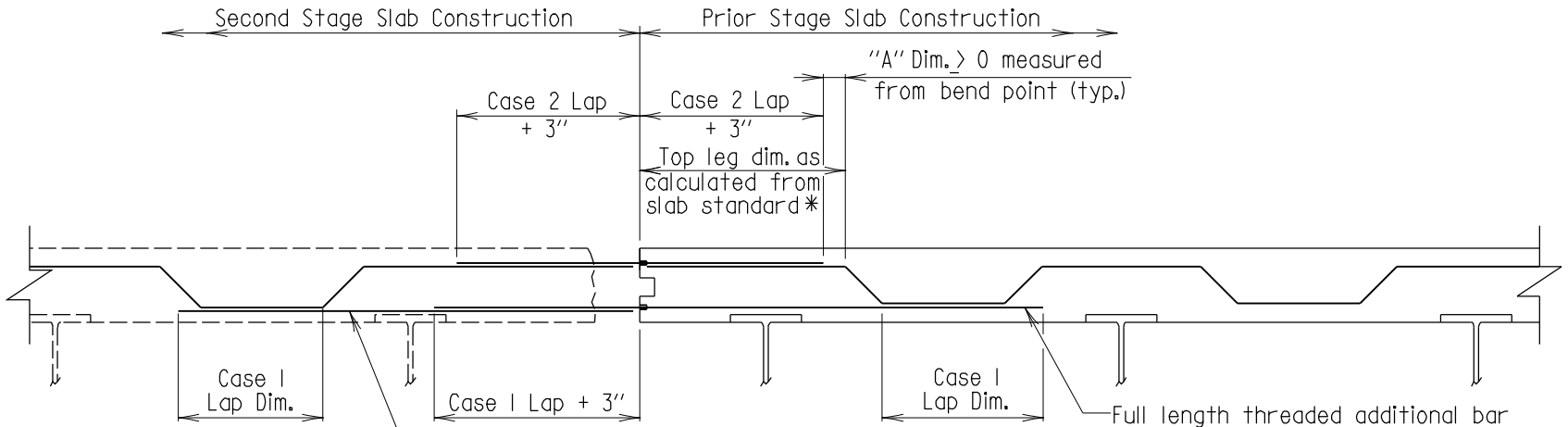
Notes:
1. For General Notes see Sht. No. 1 of 4.
2. Work with sheets 3 and 4 of 4.



SECTION

OPTION I

Scale: 1/2" = 1'-0"



Construction Gap dim. < Case 2 Lap + 1"

*Cannot move bend point to accomodate lap splice.

SECTION

OPTION II

Scale: 1/2" = 1'-0"

FHWA APPROVAL
DATE: 6-8-90

APPROVAL	REVISIONS	SHA	FHWA
.	7-31-91	.	.
.	11-15-95	.	.
.		.	.

E.S. Anderson DIRECTOR
OFFICE OF BRIDGE DEVEL.
DATE: 7/20/88

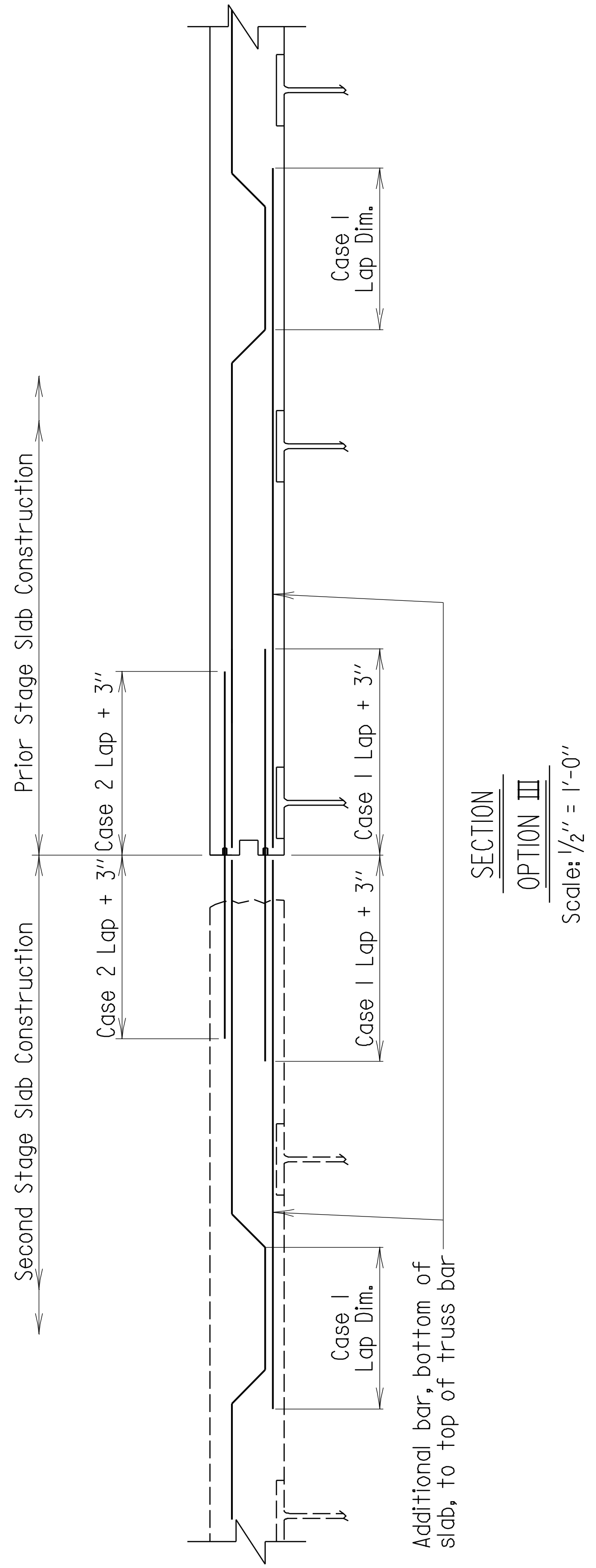
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

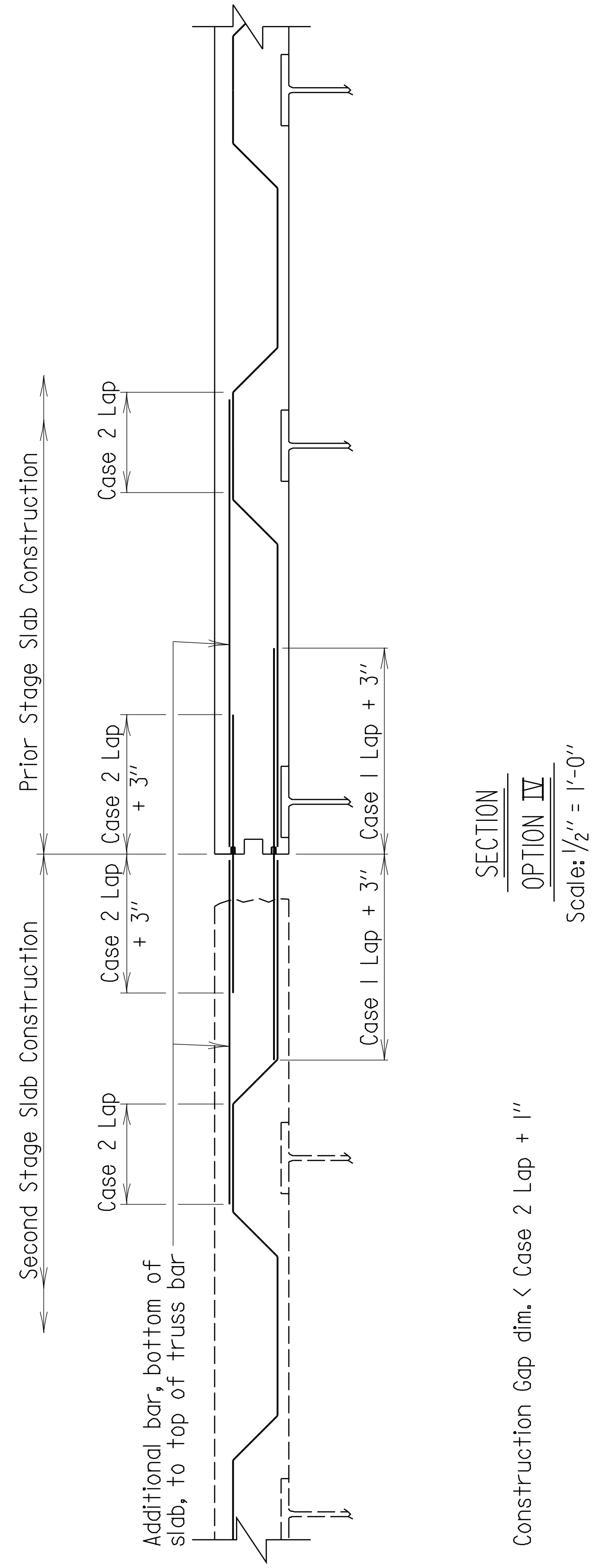
SPLICING OF BRIDGE DECK SLAB TRUSS BARS DURING STAGE CONSTRUCTION COUPLER BAR SPLICE ALTERNATIVES

STANDARD NO. BR-SS(6.31)-88-199

SHEET 2 OF 4

SUPER CONCRETE WORK





Other Related Standards
BR-SS(6.42)-95-311

Notes:
1. Work with sheets 2 and 4 of 4.
2. For General Notes see Sht. No. 1 of 4.

APPROVAL
C.S. Freedman DIRECTOR
OFFICE OF BRIDGE DEVEL.
DATE: 7/20/88

REVISIONS

SHA	FHWA
8-14-89	6-8-90
7-31-91	-
11-15-95	-
-	-

FHWA APPROVAL
DATE: 6-8-90

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

SPLICING OF BRIDGE DECK SLAB
TRUSS BARS DURING STAGE CONSTRUCTION
COUPLER BAR SPLICE ALTERNATIVES

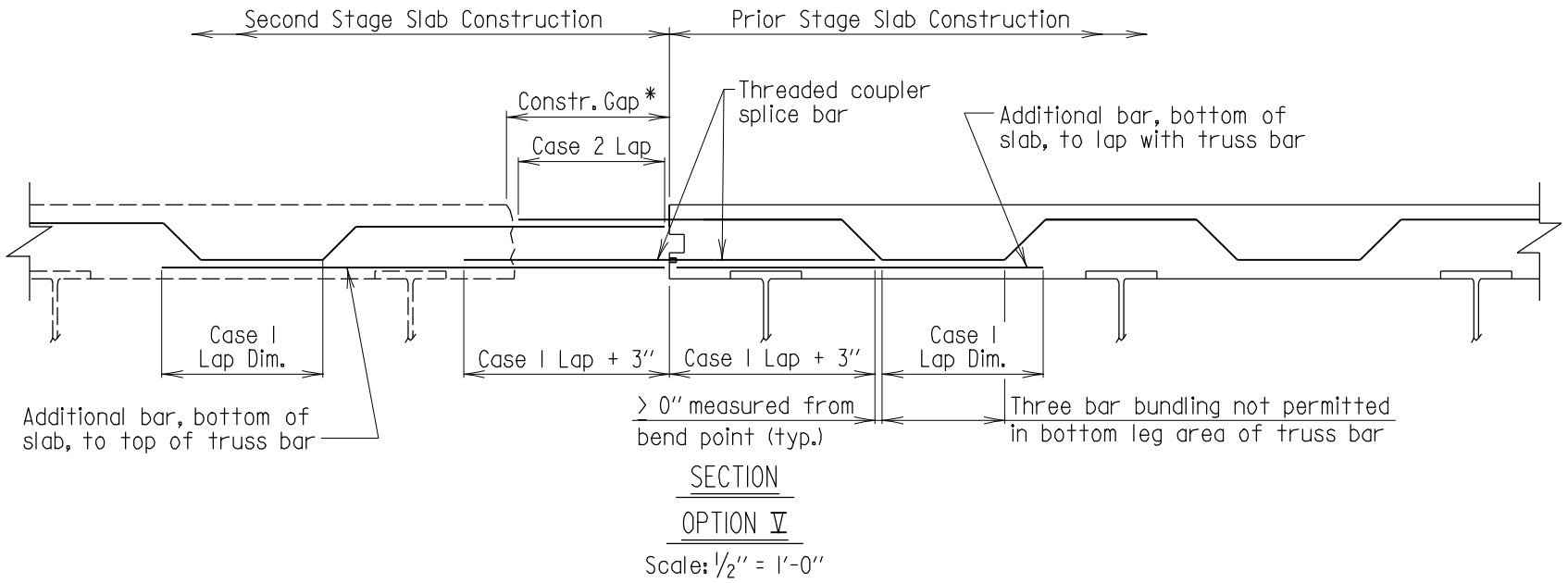
STANDARD NO. BR-SS(6.31)-88-199

SHEET 3 OF 4

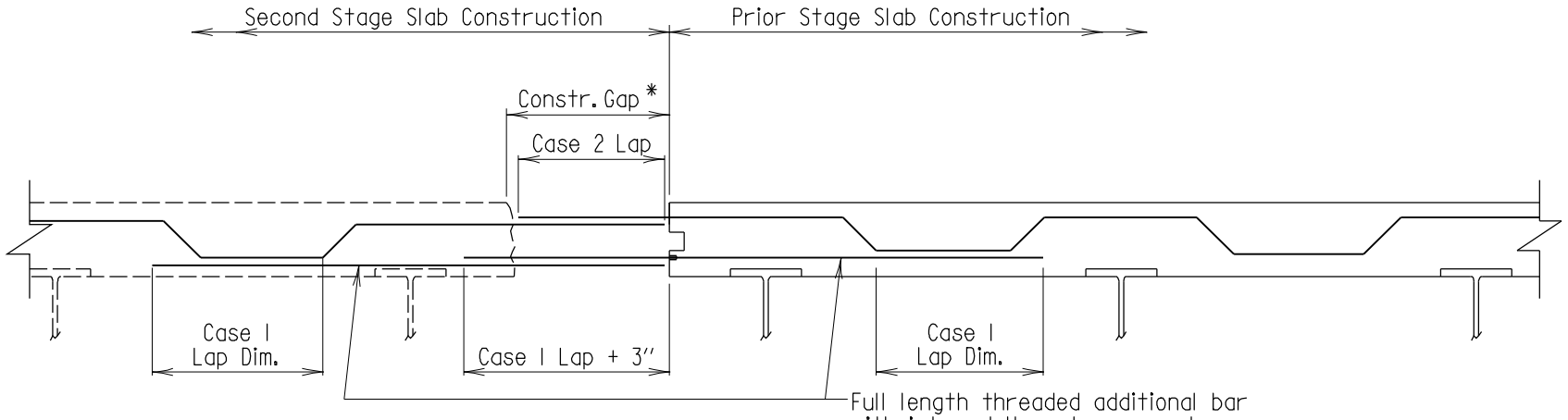
SUPER CONCRETE WORK

Other Related Standards
BR-SS(6.42)-95-311

Notes:
1. Work with sheets 2 and 3 of 4.
2. For General Notes see Sht. No. 1 of 4.



SECTION
OPTION V
Scale: 1/2" = 1'-0"



*Constr. Gap dim. ≥ Case 2 Lap dim. + 1"
Constr. Gap dim. < Case 1 Lap dim. +1"

SECTION
OPTION VI
Scale: 1/2" = 1'-0"

FHWA APPROVAL
DATE:

APPROVAL	REVISIONS	
	SHA	FHWA
	.	.
	.	.
	.	.
	.	.

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

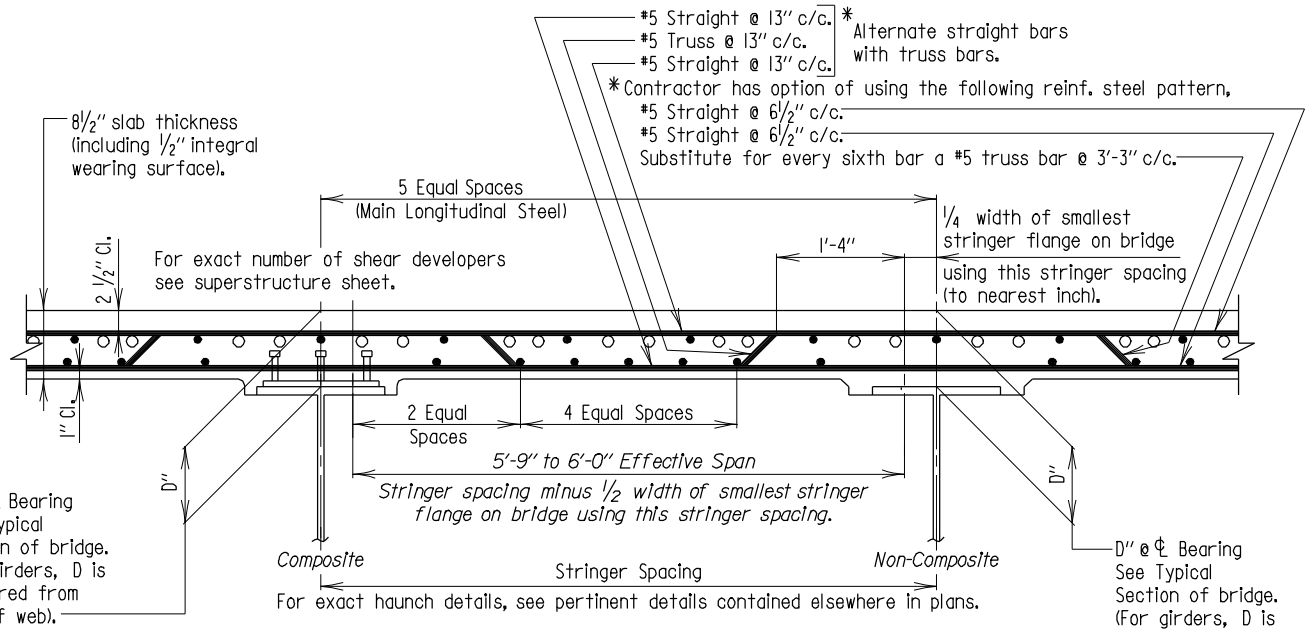
DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 11/25/95

SPLICING OF BRIDGE DECK SLAB
TRUSS BARS DURING STAGE CONSTRUCTION
COUPLER BAR SPLICE ALTERNATIVES

STANDARD NO. BR-SS(6.31)-88-199

SHEET 4 OF 4

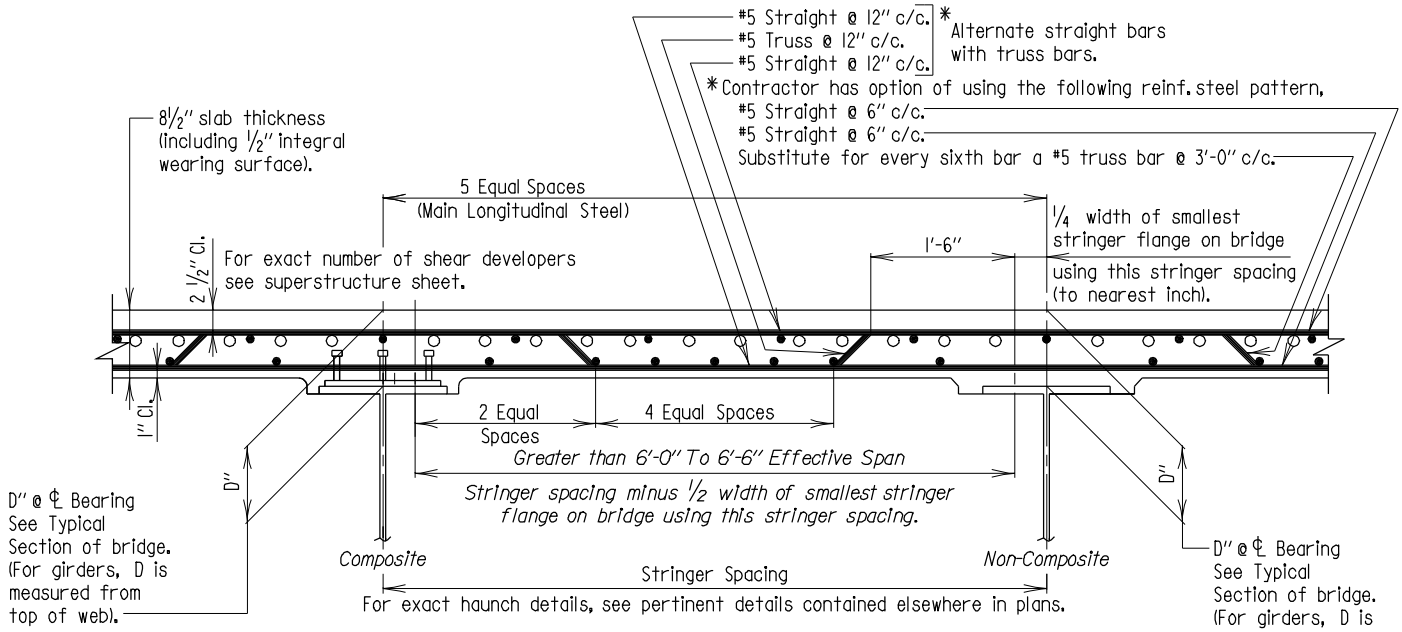
SUPER CONCRETE WORK



HS25 TYPE XXI SLAB
5'-9" TO 6'-0" EFFECTIVE SPAN

Scale: ½"=1'-0"

Note:
For effective spans less than 5'-9" see Note 3 on Std. No. BR-SS(6.11)-79-90.



HS25 TYPE XXII SLAB
GREATER THAN 6'-0" TO 6'-6" EFFECTIVE SPAN

Scale: ½"=1'-0"

Note:
Slanted lettering indicates notes "For Office Use Only".

Note:
1. All steel sizes and spacing based on ASTM A-615, Grade 60 (fs=24,000 p.s.i.).
2. Transverse bars to be placed normal to center line of stringers. (For curved girder see BR-SS(6.11)-79-90).
3. All longitudinal bars are to be #5's placed as shown except if Note 4 requires and indicates larger bars.
4. On continuous bridges, over piers, additional longitudinal steel is to be added to the top of the slab between normal bars and is indicated thus ○. See Detail No. BR-SS(6.30)-88-195 for the lengths and size of these additional bars.

APPROVAL
E S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 9/20/89

REVISIONS	
SHA	FHWA
3-22-00	·
1-22-01	·
·	·
·	·

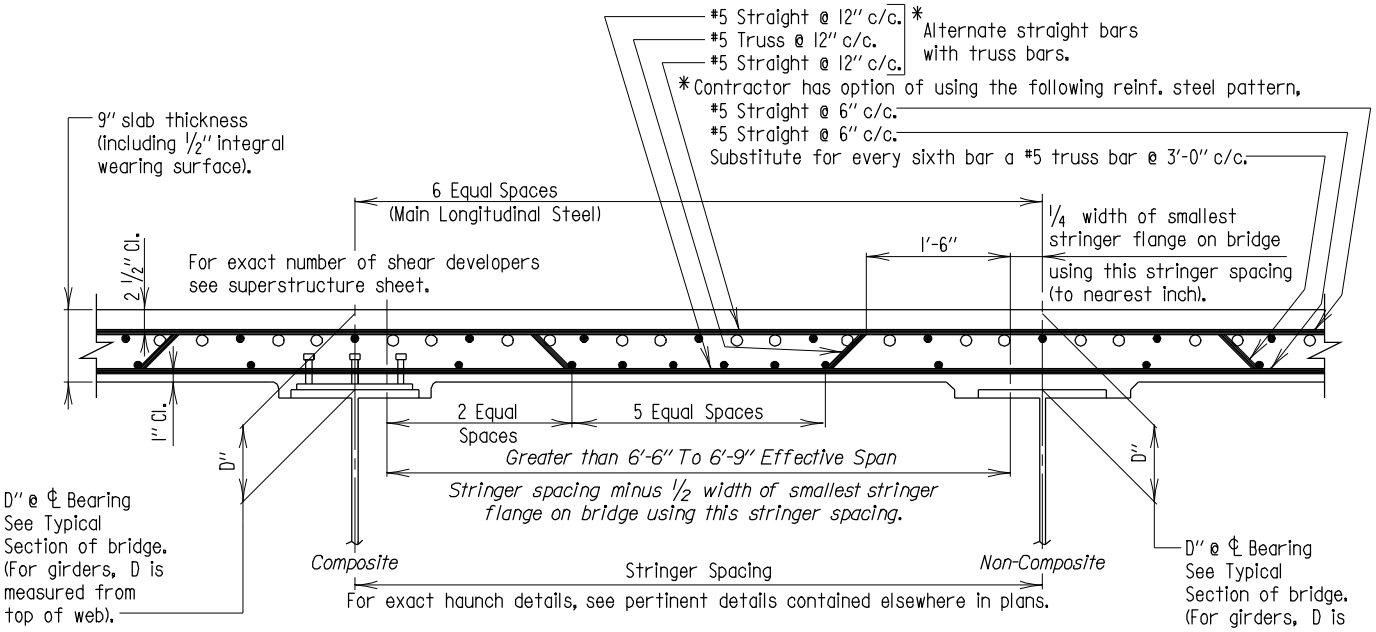
FHWA APPROVAL	
DATE: 12-27-89	

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

TYPE XXI AND XXII BRIDGE DECK SLABS HS25 LOADING

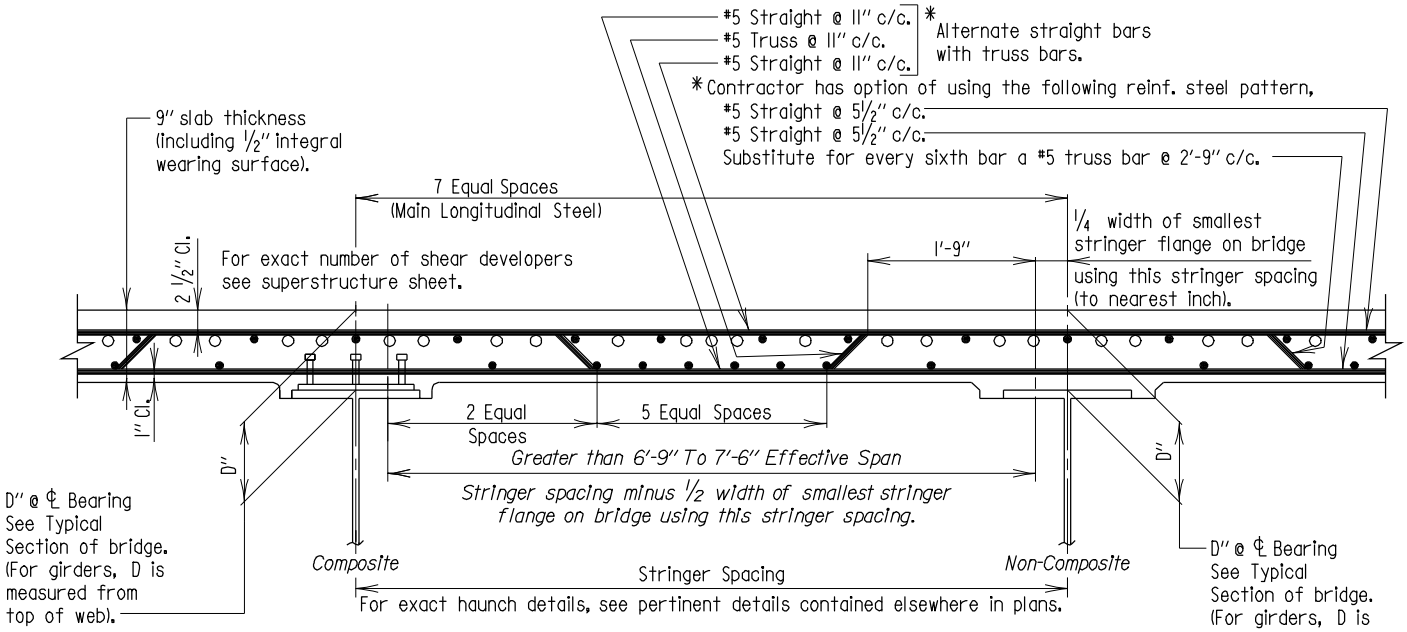
STANDARD NO. BR-SS(6.32)-89-209 **SHEET** 1 **OF** 1

SUPER CONCRETE WORK



HS25 TYPE XXIII SLAB
GREATER THAN 6'-6" TO 6'-9" EFFECTIVE SPAN

Scale: 1/2"=1'-0"



HS25 TYPE XXIV SLAB
GREATER THAN 6'-9" TO 7'-6" EFFECTIVE SPAN

Scale: 1/2"=1'-0"

Note:
Slanted lettering indicates notes "For Office Use Only".

Note:
1. All steel sizes and spacing based on ASTM A-615, Grade 60 (fs=24,000 p.s.i.).
2. Transverse bars to be placed normal to center line of stringers. (For curved girder see BR-SS(6.11)-79-90).
3. All longitudinal bars are to be #5's placed as shown except if Note 4 requires and indicates larger bars.
4. On continuous bridges, over piers, additional longitudinal steel is to be added to the top of the slab between normal bars and is indicated thus ○. See Detail No. BR-SS(6.30)-88-195 for the lengths and size of these additional bars.

APPROVAL
E.S. Friedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 9/20/89

REVISIONS	
SHA	FHWA
3-20-00	·
1-22-01	·
·	·
·	·

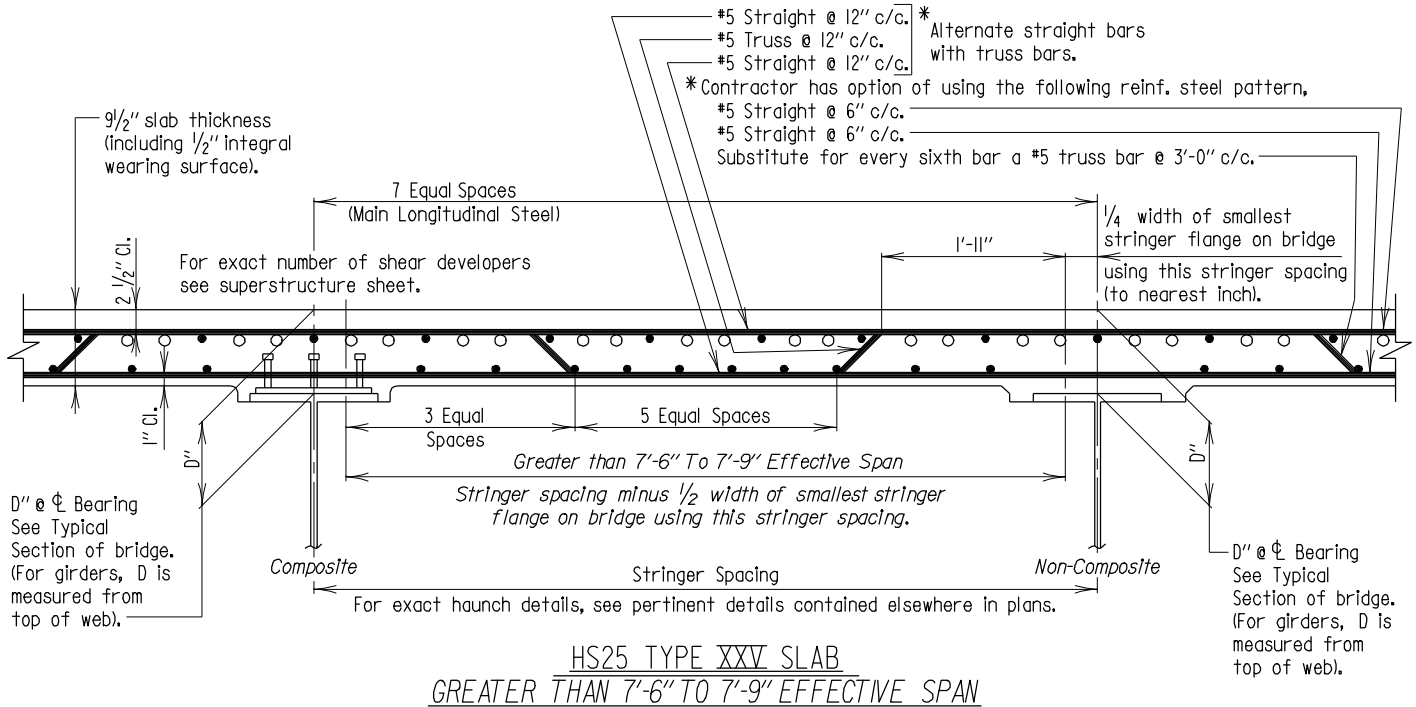
FHWA APPROVAL
DATE: 12-27-89

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

TYPE XXIII AND XXIV BRIDGE DECK SLABS HS25 LOADING

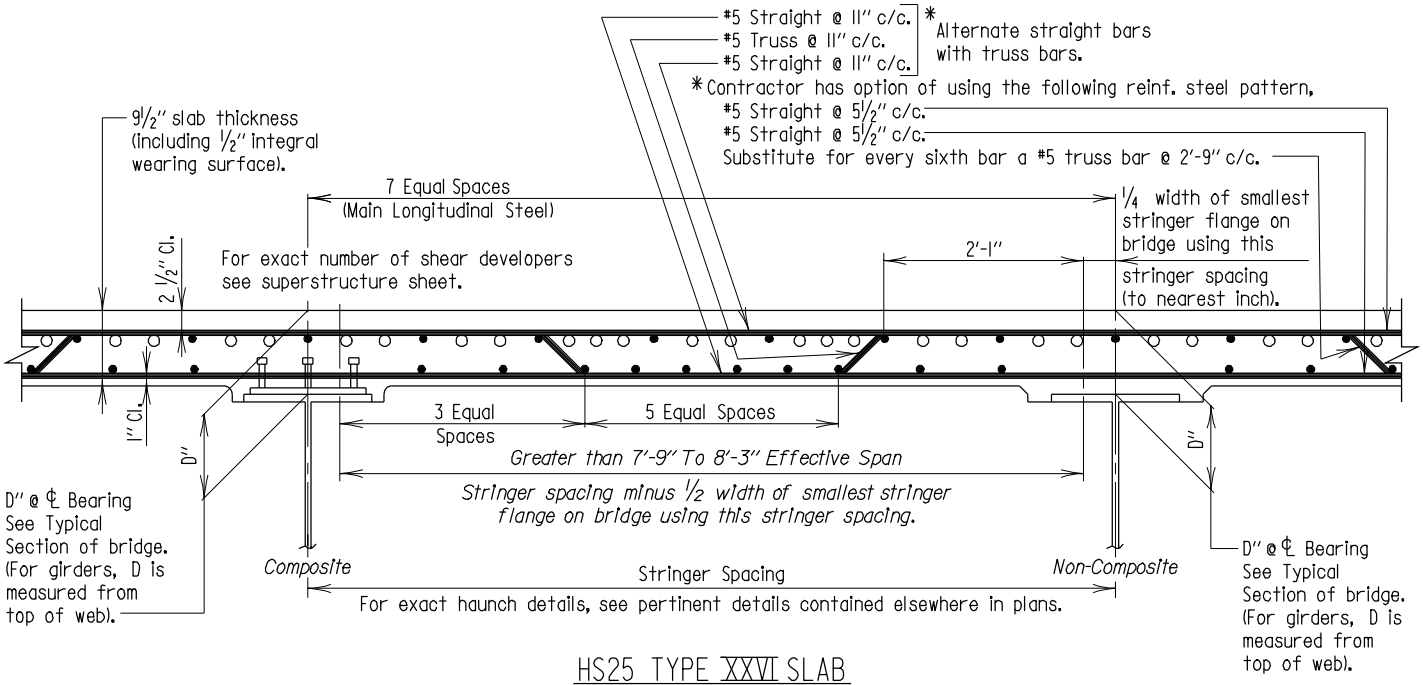
STANDARD NO. BR-SS(6.33)-89-210 **SHEET** 1 **OF** 1

SUPER CONCRETE WORK



HS25 TYPE XXV SLAB
GREATER THAN 7'-6" TO 7'-9" EFFECTIVE SPAN

Scale: ½"=1'-0"



HS25 TYPE XXVI SLAB
GREATER THAN 7'-9" TO 8'-3" EFFECTIVE SPAN

Scale: ½"=1'-0"

Note:
1. All steel sizes and spacing based on ASTM A-615, Grade 60 (fs=24,000 p.s.i.).
2. Transverse bars to be placed normal to center line of stringers. (For curved girder see BR-SS(6.11)-79-90).
3. All longitudinal bars are to be #5's placed as shown except if Note 4 requires and indicates larger bars.
4. On continuous bridges, over piers, additional longitudinal steel is to be added to the top of the slab between normal bars and is indicated thus ○. See Detail No. BR-SS(6.30)-88-195 for the lengths and size of these additional bars.

Note: Slanted lettering indicates notes "For Office Use Only".

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 9/20/89

REVISIONS	
SHA	FHWA
12-8-92	·
3-20-00	·
1-22-01	·
·	·

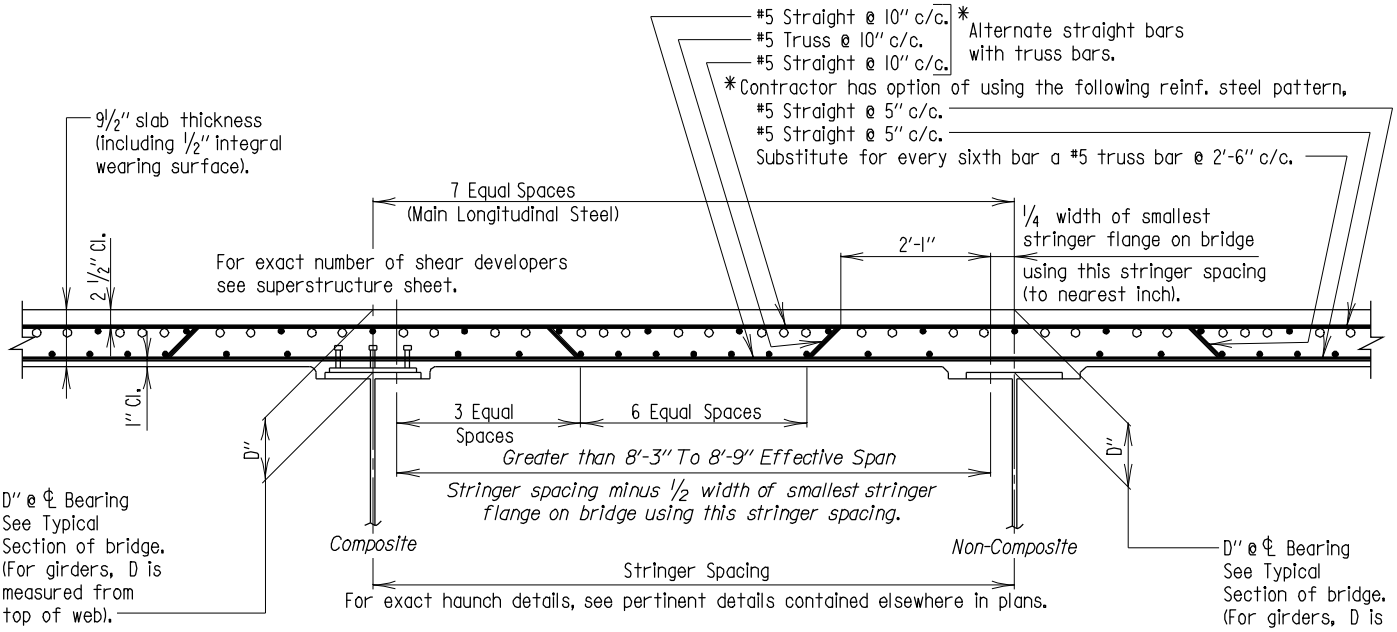
FHWA APPROVAL
DATE: 12-27-89

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

TYPE XXV AND XXVI BRIDGE DECK SLABS HS25 LOADING

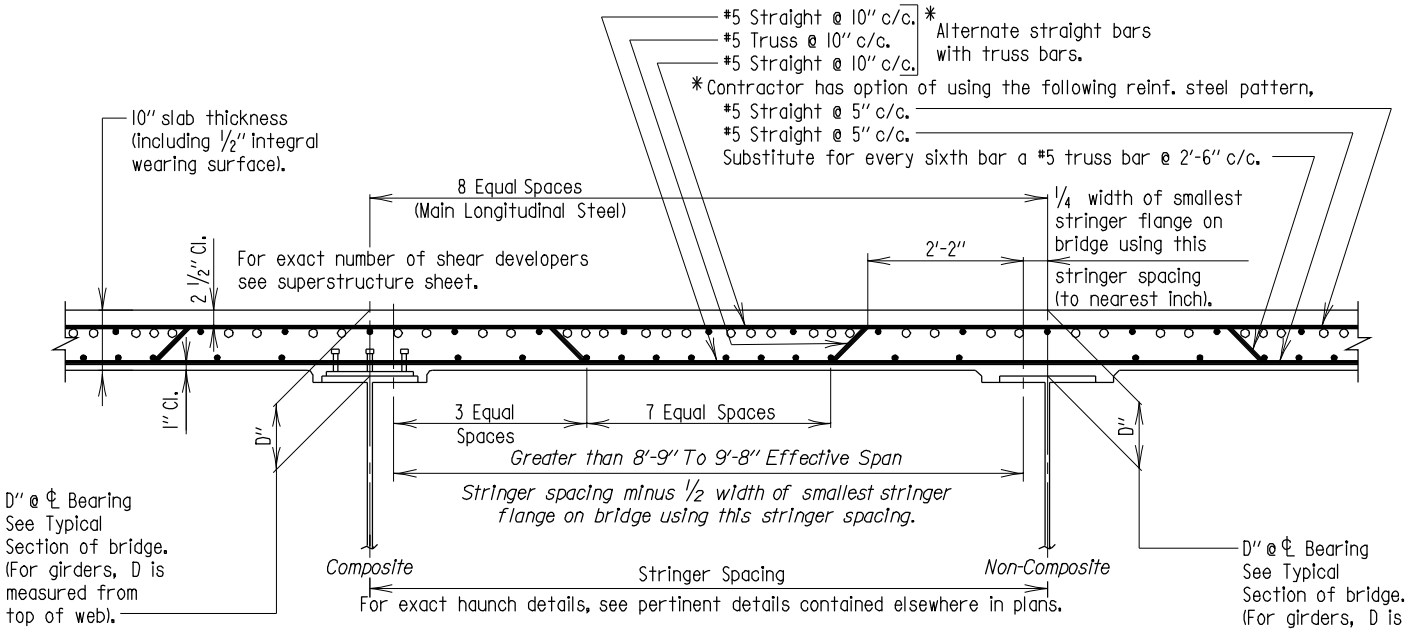
STANDARD NO. BR-SS(6.34)-89-211 SHEET 1 OF 1

SUPER CONCRETE WORK



HS25 TYPE XXVII SLAB
GREATER THAN 8'-3" TO 8'-9" EFFECTIVE SPAN

Scale: ⅜"=1'-0"



HS25 TYPE XXVIII SLAB
GREATER THAN 8'-9" TO 9'-8" EFFECTIVE SPAN

Scale: ⅜"=1'-0"

Note:
Slanted lettering indicates notes "For Office Use Only".

Note:
1. All steel sizes and spacing based on ASTM A-615, Grade 60 (fs=24,000 p.s.i.).
2. Transverse bars to be placed normal to center line of stringers. (For curved girder see BR-SS(6.11)-79-90).
3. All longitudinal bars are to be #5's placed as shown except if Note 4 requires and indicates larger bars.
4. On continuous bridges, over piers, additional longitudinal steel is to be added to the top of the slab between normal bars and is indicated thus ○. See Detail No. BR-SS(6.30)-88-195 for the lengths and size of these additional bars.

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 9/20/89

REVISIONS	
SHA	FHWA
6-8-93	·
3-20-00	·
1-22-01	·
·	·

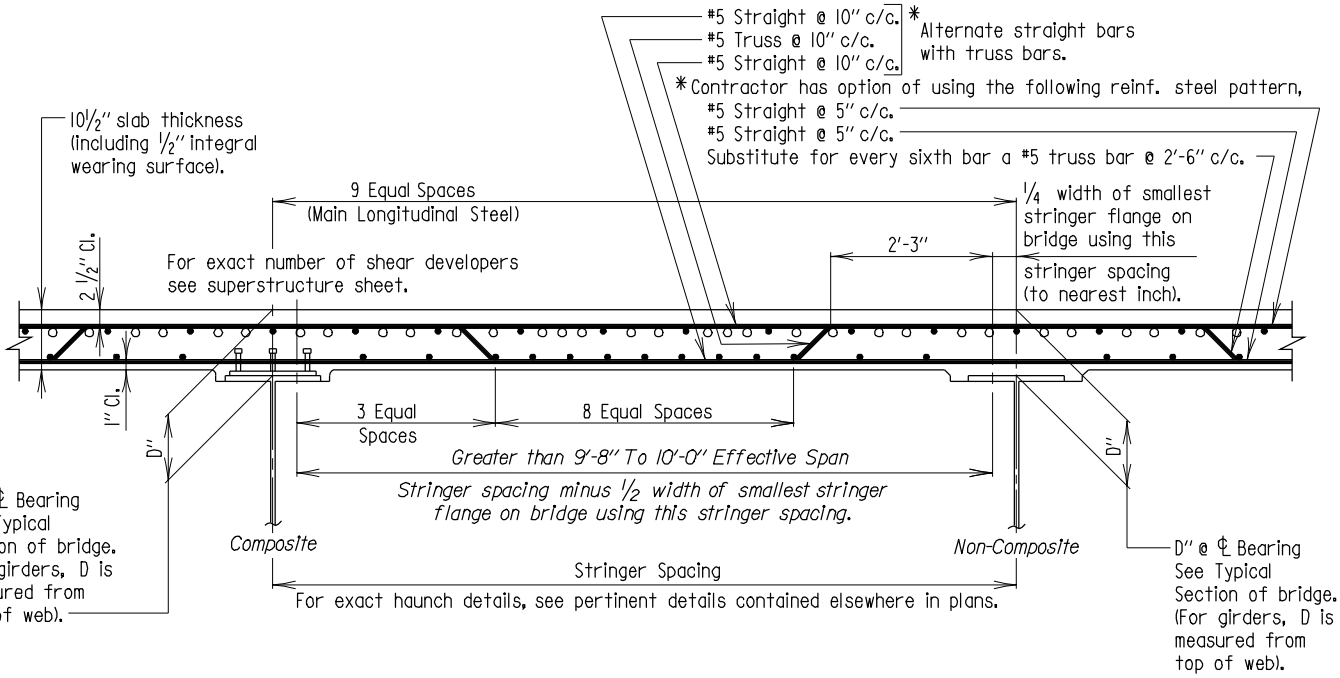
FHWA APPROVAL
DATE: 12-27-89

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

TYPE XXVII AND XXVIII BRIDGE DECK SLABS HS25 LOADING

STANDARD NO. BR-SS(6.35)-89-212 **SHEET** 1 **OF** 1

SUPER CONCRETE WORK



HS25 TYPE XXIX SLAB
GREATER THAN 9'-8" TO 10'-0" EFFECTIVE SPAN

Scale: 3/8"=1'-0"

Note:
1. All steel sizes and spacing based on ASTM A-615, Grade 60 (fs=24,000 p.s.i.).
2. Transverse bars to be placed normal to center line of stringers. (For curved girder see BR-SS(6.11)-79-90).
3. All longitudinal bars are to be #5's placed as shown except if Note 4 requires and indicates larger bars.
4. On continuous bridges, over piers, additional longitudinal steel is to be added to the top of the slab between normal bars and is indicated thus ○. See Detail No. BR-SS(6.30)-88-195 for the lengths and size of these additional bars.

Note:
Slanted lettering indicates notes "For Office Use Only".

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 9/20/89

REVISIONS	
SHA	FHWA
3-20-00	·
1-22-01	·
·	·
·	·

FHWA APPROVAL
DATE: 12-27-89

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

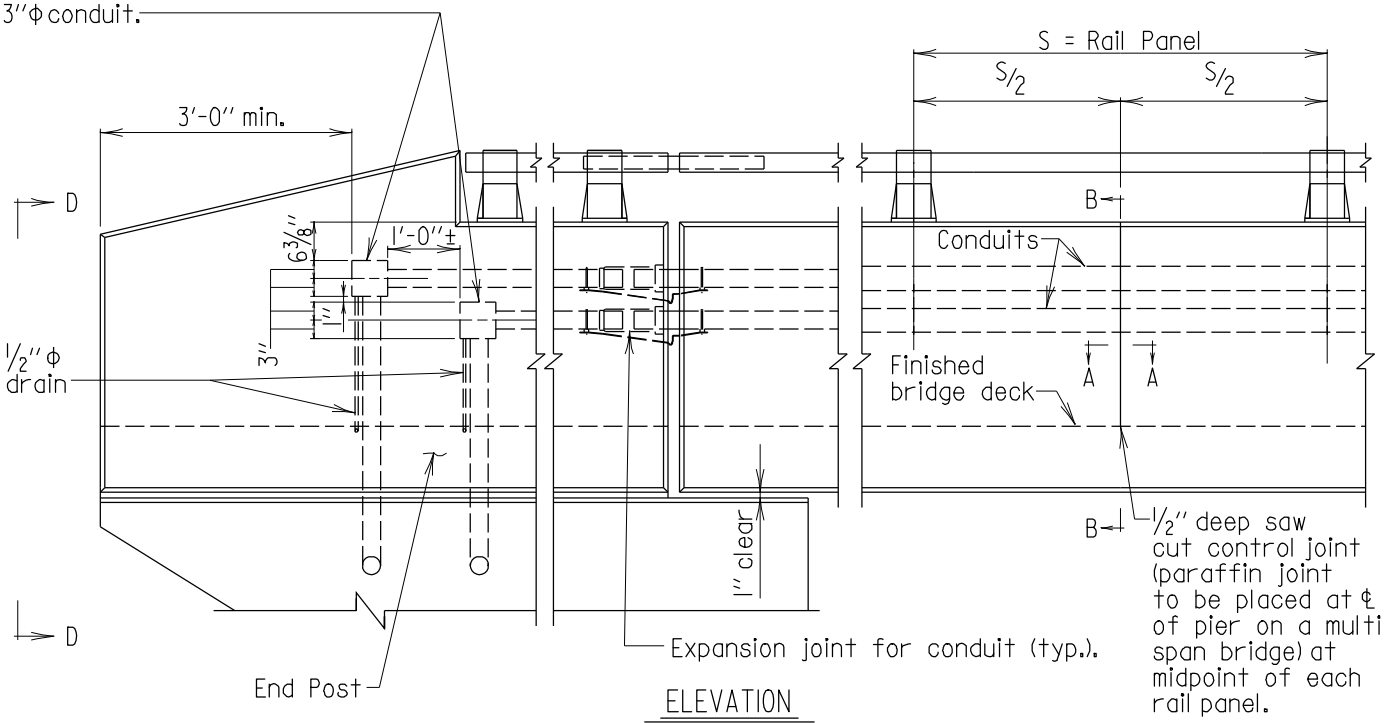
TYPE XXIX BRIDGE DECK SLAB
HS25 LOADING

STANDARD NO. BR-SS(6.36)-89-213 SHEET 1 OF 1

SUPER CONCRETE WORK

Note: Details shown are for single rail; double rail and fencing details are similar. On bridges with no fencing or railing see General Plan and Elevation for parapet control joint spacing.

6" x 6" x 8" galvanized cast iron, galvanized steel or fiberglass U.L. listed junction boxes with covers. Provide holes in box for 3"ϕ conduit.



ELEVATION

Scale: 3/8" = 1'-0"

Note: For Section A-A and B-B see sheets 2 & 3 of 4. For View D-D see sheet 2 and 3 of 4. For Sections A-A and B-B at centerline of pier on multi-span continuous bridges, see sheet 4 of 4.

Notes:

1. The conduits and junction boxes are to be placed only when indicated in the Superstructure "Typical Section." If ℄ to ℄ of end junction boxes exceed 200', then additional junction boxes shall be placed in parapet, between control joints, so that the maximum distance between boxes is 200'. Junction boxes for light standards, may be utilized. All junction boxes to have 1/2"ϕ drain at drain at low point of box.
2. Conduit may be either PVC or galvanized pipe.

APPROVAL
C S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 3/27/91

REVISIONS	
SHA	FHWA
6-1-05	·
10-13-06	·
1-9-08	·
4-16-08	·

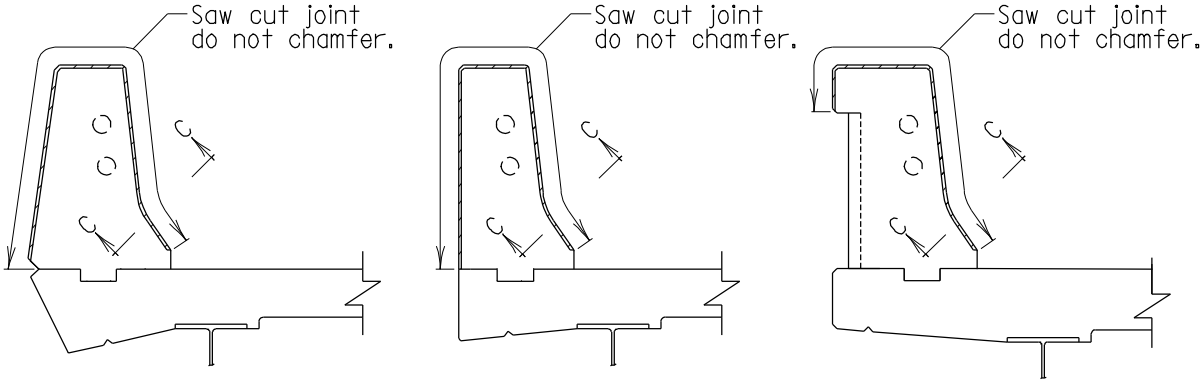
FHWA APPROVAL
DATE: .

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

PARAPET CONTROL JOINT AND DUAL CONDUIT PLACEMENT WITH 34" F-SHAPE PARAPET AND PARAPET WITH SIDEWALK

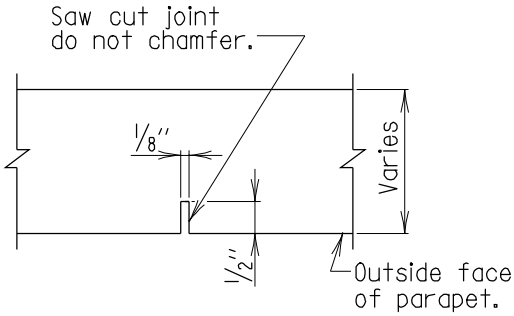
STANDARD NO. BR-SS(6.37)-05-247A SHEET 1 OF 4

SUPER-CONCRETE WORK



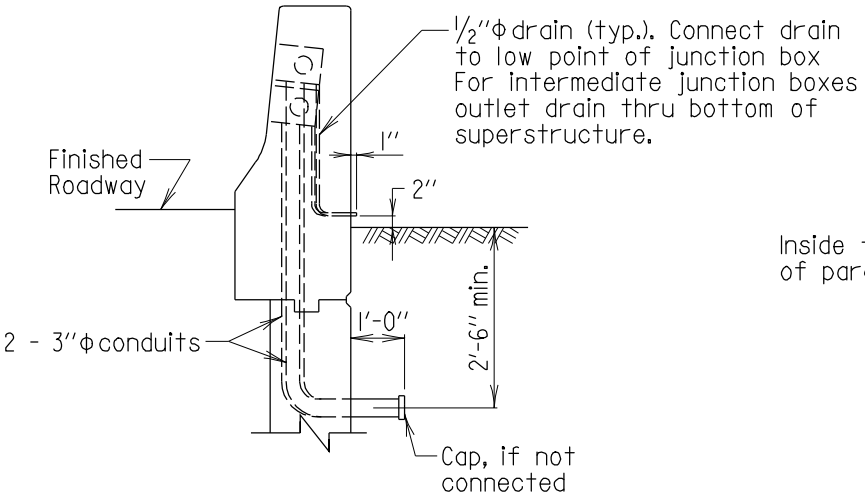
SECTION B-B

Scale: 3/8" = 1-0"



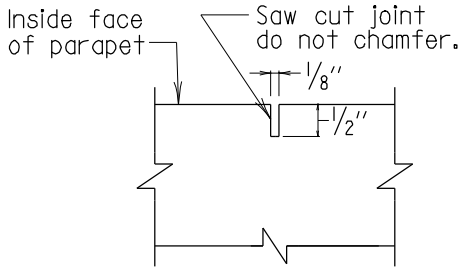
SECTION A-A

Scale: None



VIEW D-D - F-SHAPE PARAPET

Scale: 3/8" = 1'-0"



SECTION C-C

Scale: None

Notes:
1. Place saw cut joint at center of every rail panel.
2. Parapet is placed continuously.
3. Saw cut control joint to be sawed same day as concrete is poured.
4. Fencing and railing not shown.

APPROVAL
C.S. Friedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
12-1-93	·
9-24-96	·
1-22-01	·
6-1-05	·

FHWA APPROVAL
DATE: .

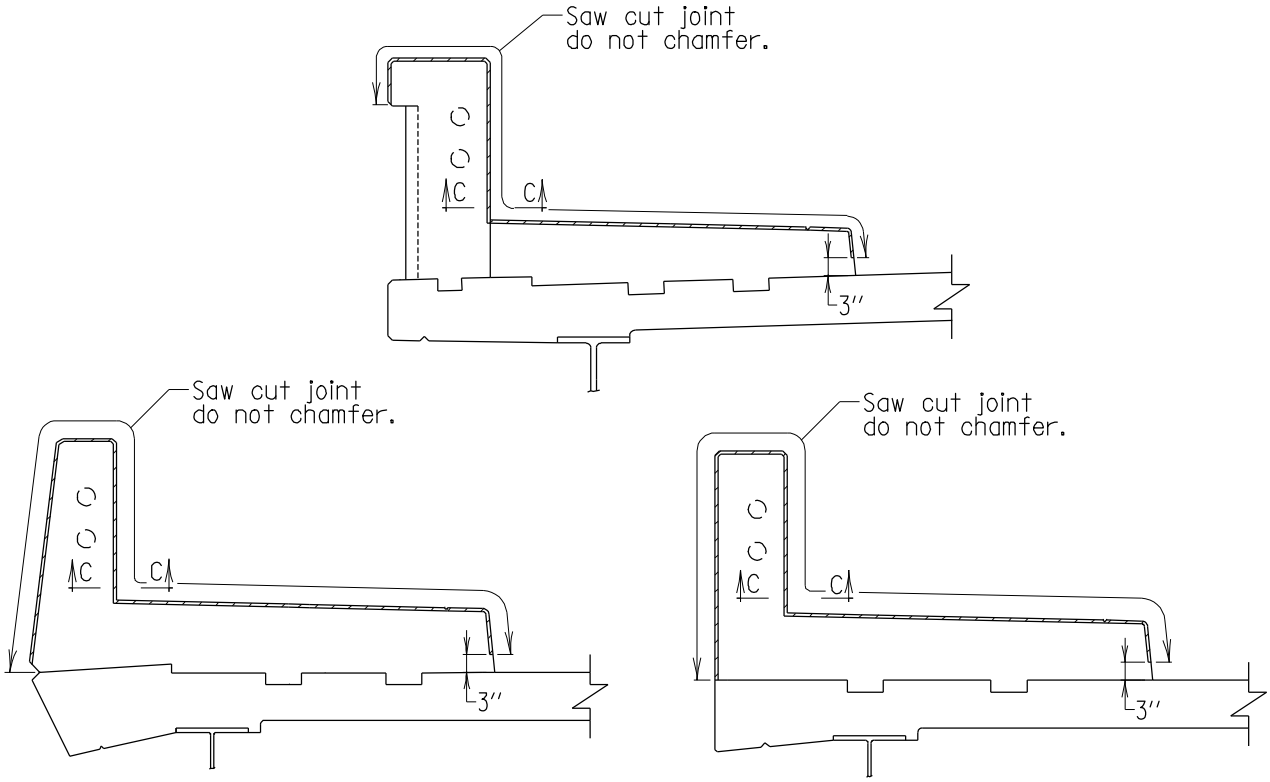
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

PARAPET CONTROL JOINT AND DUAL CONDUIT PLACEMENT WITH 34" F-SHAPE PARAPET AND PARAPET WITH SIDEWALK

STANDARD NO. BR-SS(6.37)-05-247A

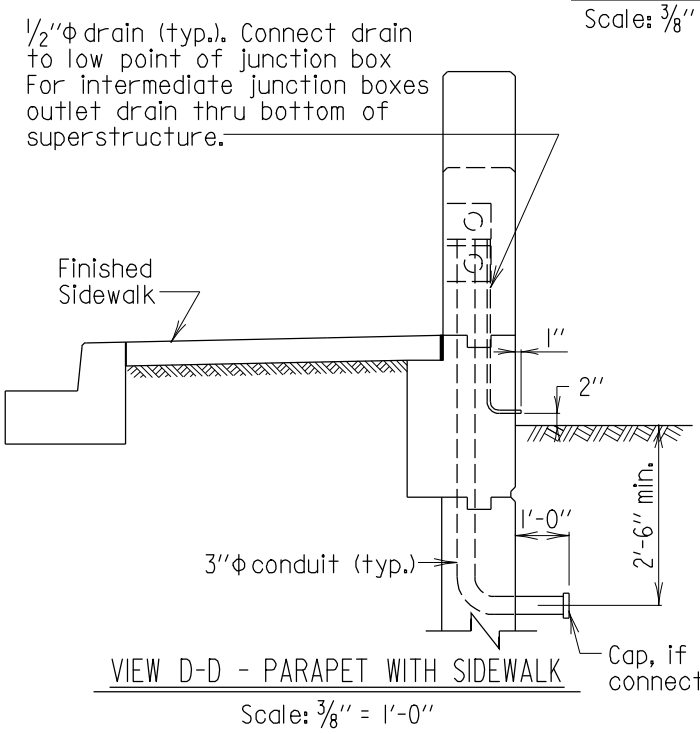
SHEET 2 OF 4

SUPER-CONCRETE WORK



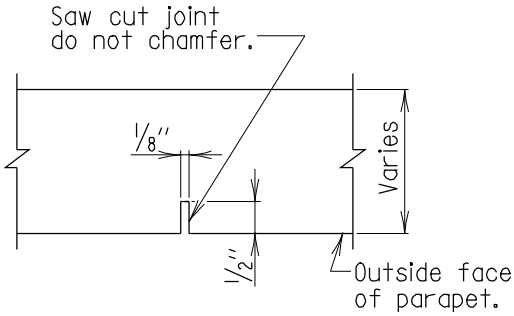
SECTION B-B

Scale: 3/8'' = 1-0''



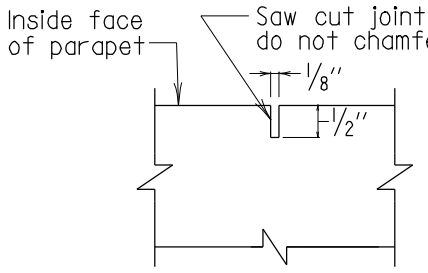
VIEW D-D - PARAPET WITH SIDEWALK

Scale: 3/8'' = 1'-0''



SECTION A-A

Scale: None



SECTION C-C

Scale: None

Notes:
1. Place saw cut joint at center of every rail panel.
2. Parapet is placed continuously.
3. Saw cut control joint to be sawed same day as concrete is poured.
4. Fencing and railing not shown.

APPROVAL
E S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 3/27/91

REVISIONS	
SHA	FHWA
10-30-92	·
12-1-93	·
9-24-96	·
6-1-05	·

FHWA APPROVAL
DATE: .

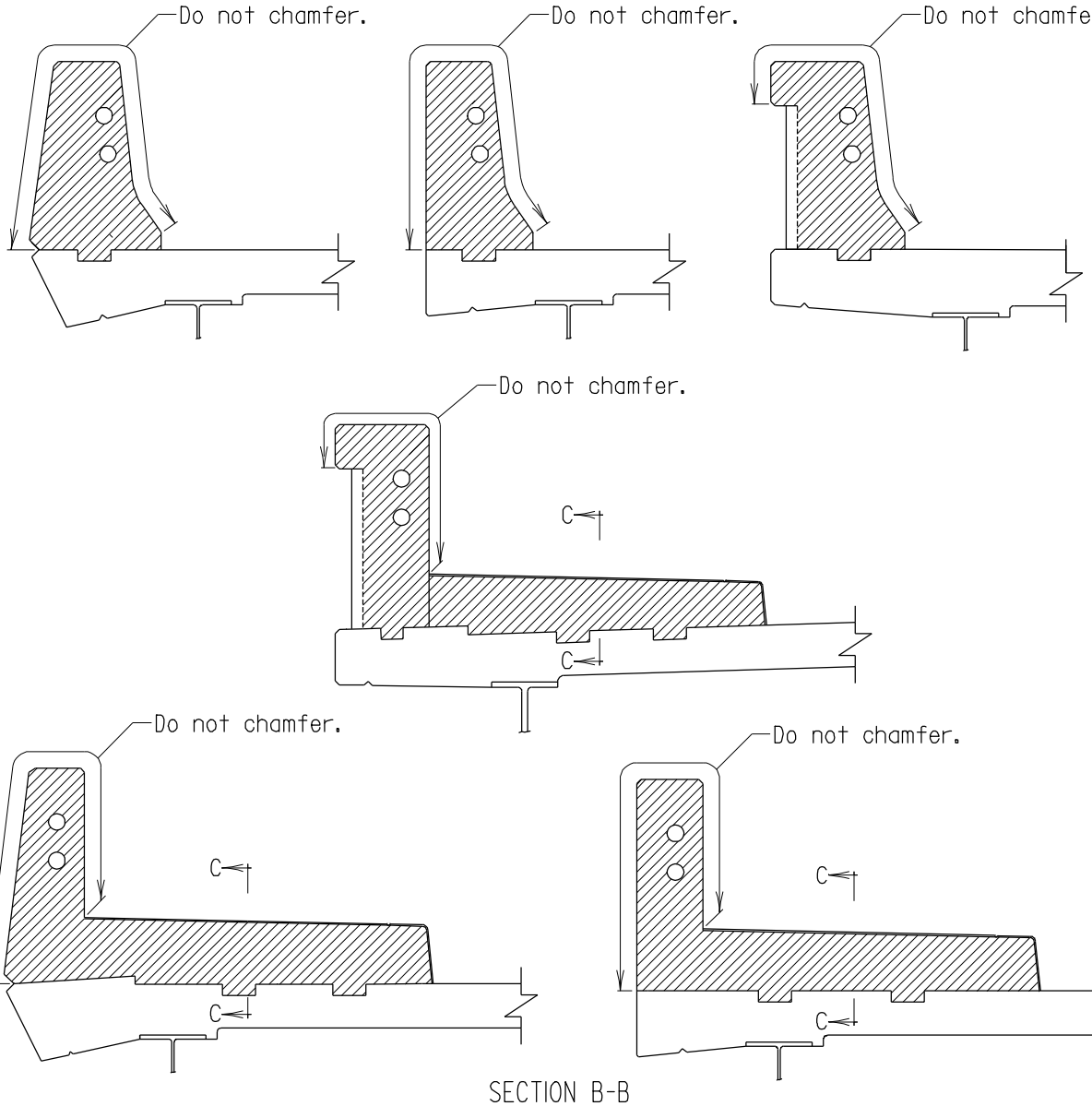
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

PARAPET CONTROL JOINT AND DUAL CONDUIT PLACEMENT WITH 34'' F-SHAPE PARAPET AND PARAPET WITH SIDEWALK

STANDARD NO. BR-SS(6.37)-05-247A

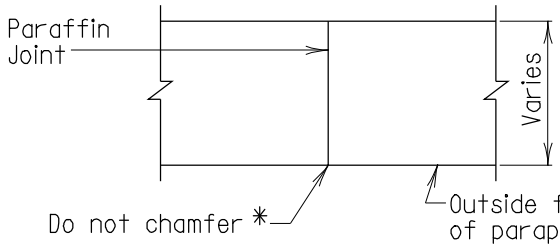
SHEET 3 OF 4

SUPER-CONCRETE WORK



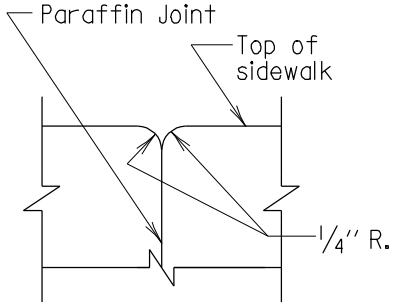
SECTION B-B

Scale: 3/8" = 1-0"



SECTION A-A

Scale: None



SECTION C-C

Scale: Full

*In order to insure a smooth and acceptable surface, 420.03.11 (Construction Joints) will be strictly adhered to.

Notes:

1. Place vertical paraffin joint, shown hatched, at centerline of pier on multi-span continuous bridges.
2. The placement of adjacent sections shall have a 40 hour delay between placements.
3. Railing and fencing not shown.

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 12/1/93

REVISIONS	
SHA	FHWA
9-24-96	·
12-17-01	·
6-1-05	·
10-13-06	·

FHWA APPROVAL	
DATE: .	

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

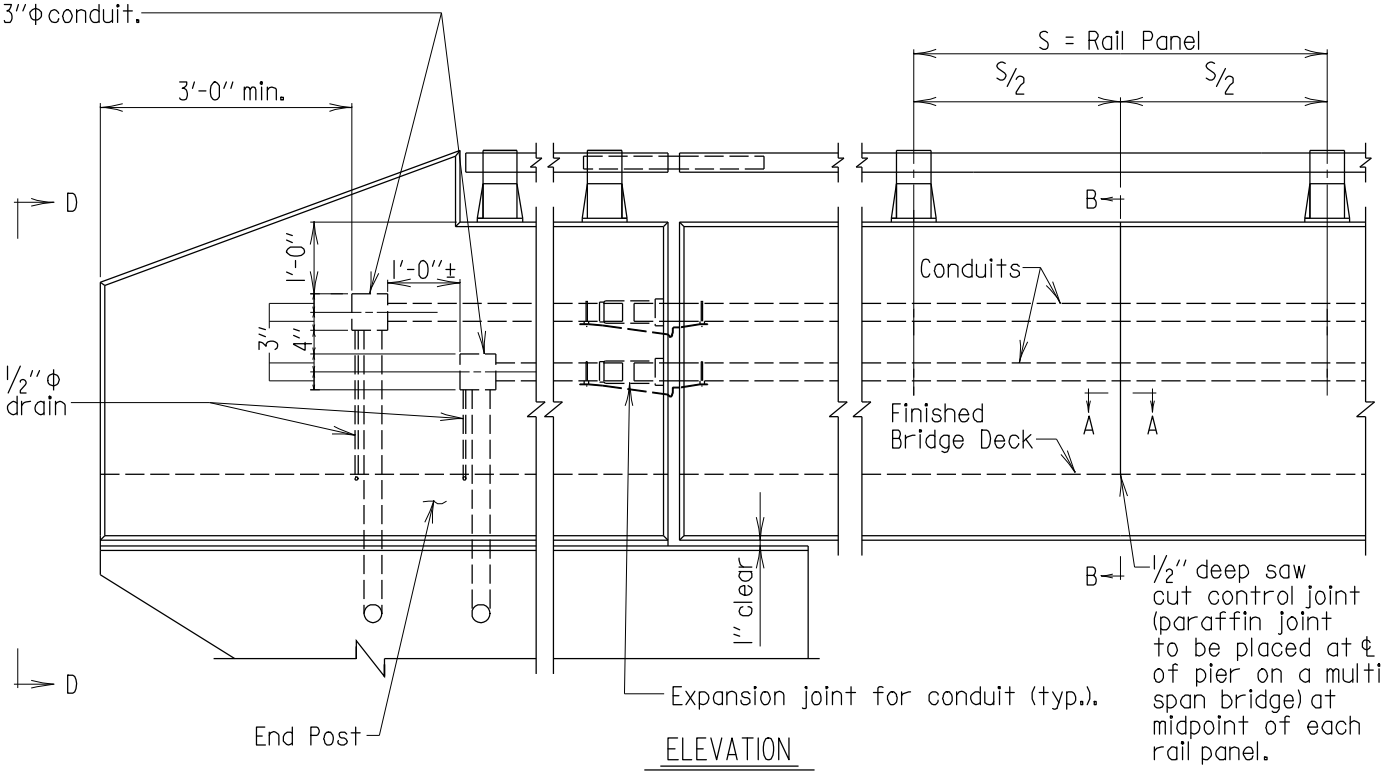
PARAPET CONTROL JOINT AND DUAL CONDUIT PLACEMENT WITH 34" F-SHAPE PARAPET AND PARAPET WITH SIDEWALK

STANDARD NO. BR-SS(6.37)-05-247A

SHEET 4 OF 4

SUPER-CONCRETE WORK

Note: Details shown are for single rail; double rail and fencing details are similar. On bridges with no fencing or railing see General Plan and Elevation for parapet control joint spacing.



ELEVATION

Scale: 3/8" = 1'-0"

Note: For Section A-A & B-B see sheet 2 of 3.
For View D-D see sheet 2 of 3.
For Sections A-A and B-B at centerline of pier on multi-span continuous bridges, see sheet 3 of 3.

Notes:

1. The conduits and junction boxes are to be placed only when indicated in the Superstructure "Typical Section." If ℄ to ℄ of end junction boxes exceed 200', then additional junction boxes shall be placed in parapet, between control joints, so that the maximum distance between boxes is 200'. Junction boxes for light standards, may be utilized. All junction boxes to have 1/2"ϕ drain at drain at low point of box.
2. Conduit may be either PVC or galvanized pipe.

APPROVAL
E S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
10-13-06	·
1-9-08	·
4-16-08	·
·	·

FHWA APPROVAL
DATE: .

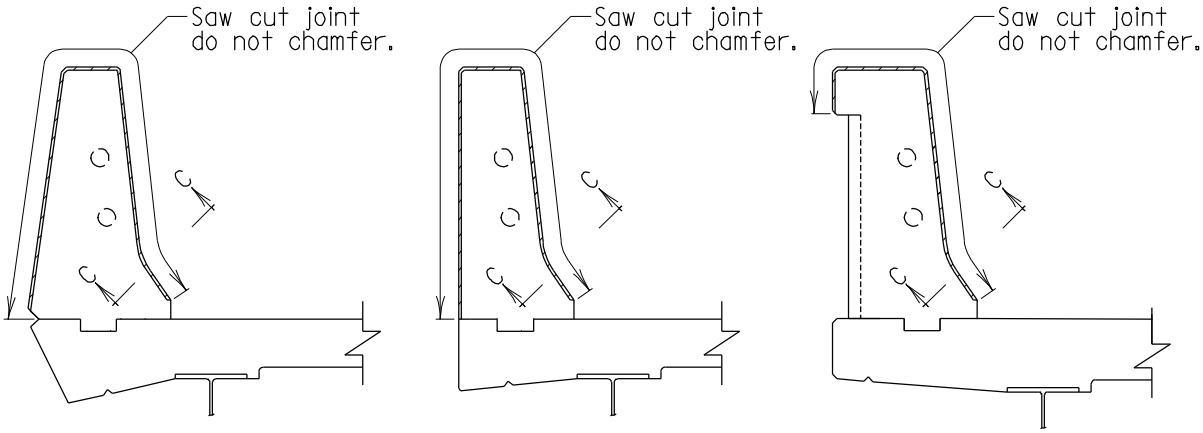
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

PARAPET CONTROL JOINT AND DUAL CONDUIT PLACEMENT WITH 42" F-SHAPE PARAPET

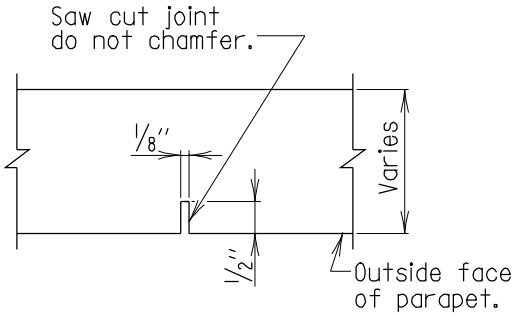
STANDARD NO. BR-SS(6.37)-05-247B

SHEET 1 OF 3

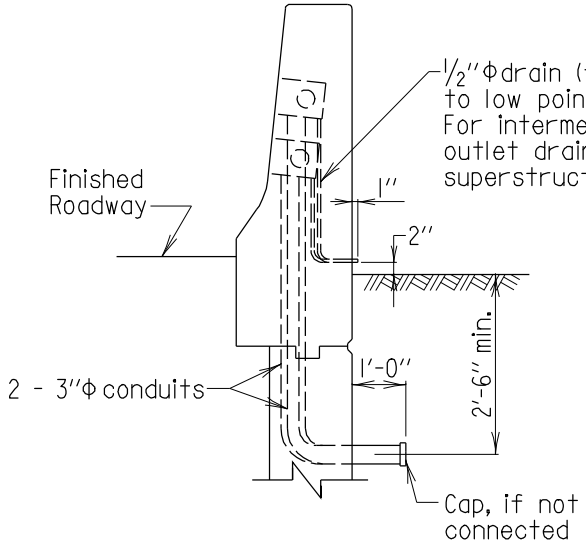
SUPER-CONCRETE WORK



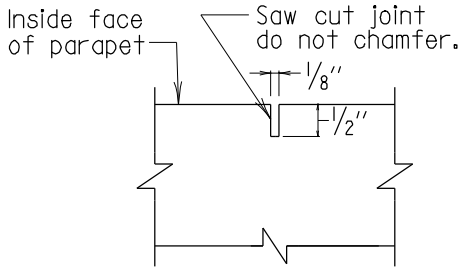
SECTION B-B
Scale: 3/8" = 1-0"



SECTION A-A
Scale: None



VIEW D-D
Scale: 3/8" = 1'-0"



SECTION C-C
Scale: None

Notes:
1. Place saw cut joint at center of every rail panel.
2. Parapet is placed continuously.
3. Saw cut control joint to be sawed same day as concrete is poured.
4. Fencing and railing not shown.

APPROVAL
E S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA

FHWA APPROVAL
DATE:

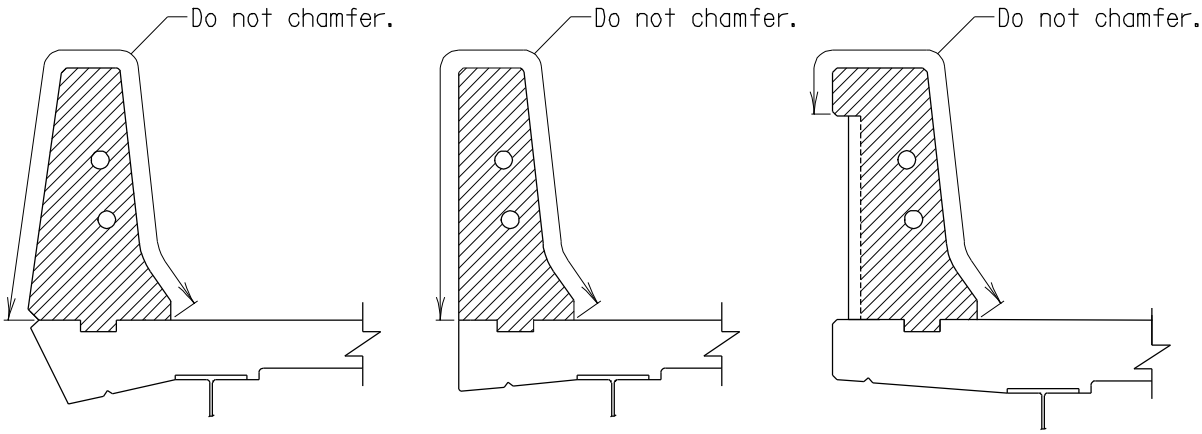
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

PARAPET CONTROL JOINT AND DUAL CONDUIT PLACEMENT WITH 42" F-SHAPE PARAPET

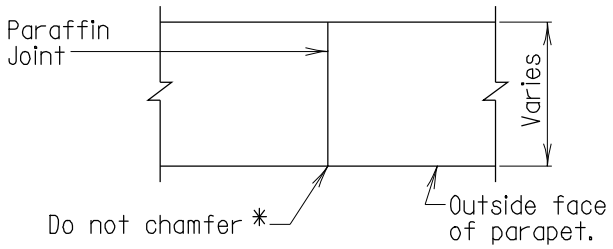
STANDARD NO. BR-SS(6.37)-05-247B

SHEET 2 OF 3

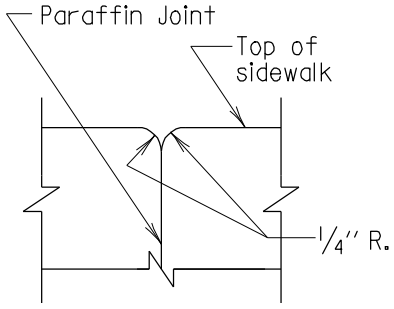
SUPER-CONCRETE WORK



SECTION B-B
Scale: 3/8" = 1-0"



SECTION A-A
Scale: None



SECTION C-C
Scale: Full

*In order to insure a smooth and acceptable surface, 420.03.II (Construction Joints) will be strictly adhered to.

Notes:
1. Place vertical paraffin joint, shown hatched, at centerline of pier on multi-span continous bridges.
2. The placement of adjacent sections shall have a 40 hour delay between placements.
3. Railing and fencing not shown.

APPROVAL
E S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
.	.
.	.
.	.
.	.

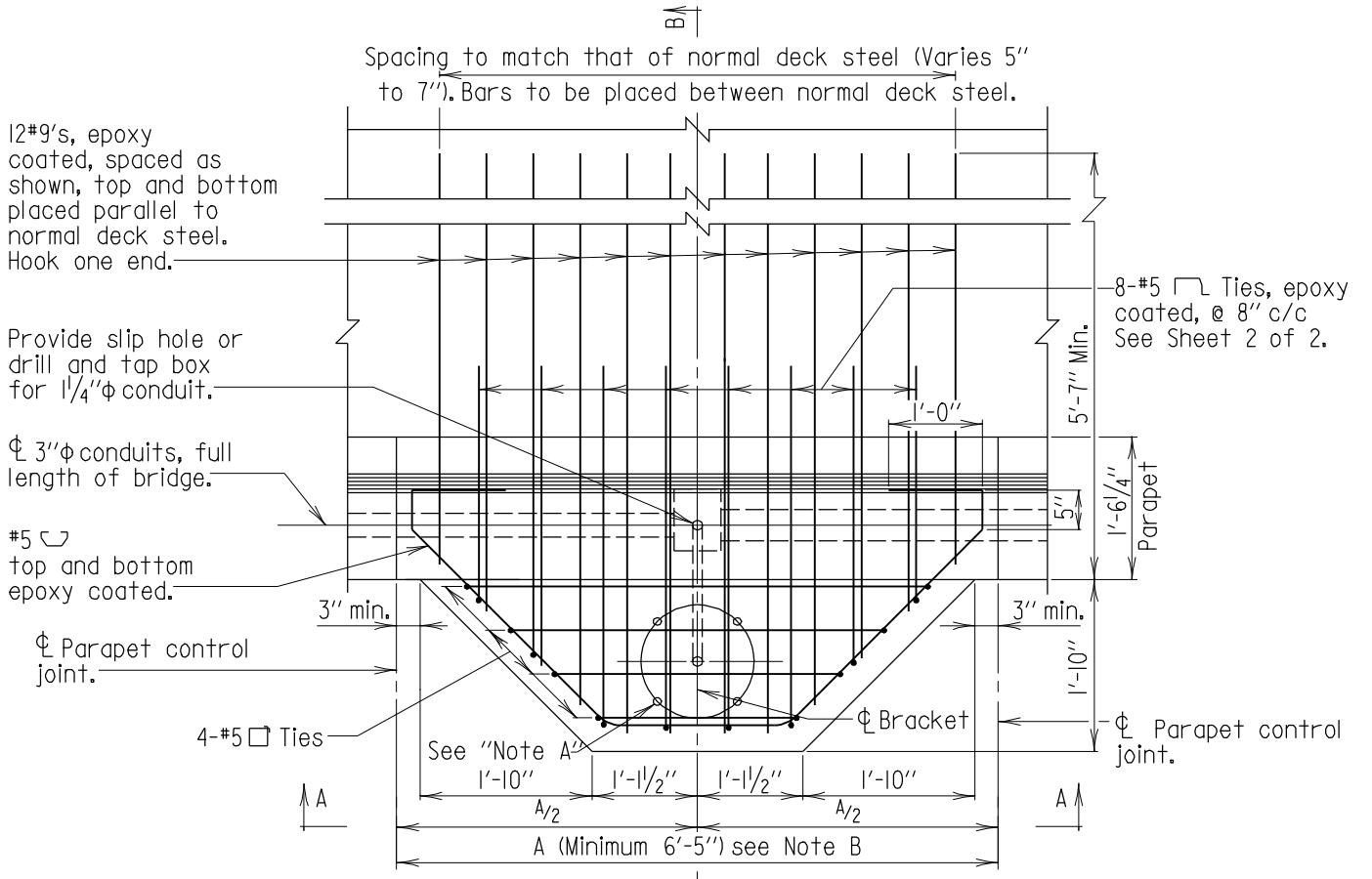
FHWA APPROVAL
DATE: .

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

PARAPET CONTROL JOINT AND DUAL CONDUIT PLACEMENT WITH 42" F-SHAPE PARAPET

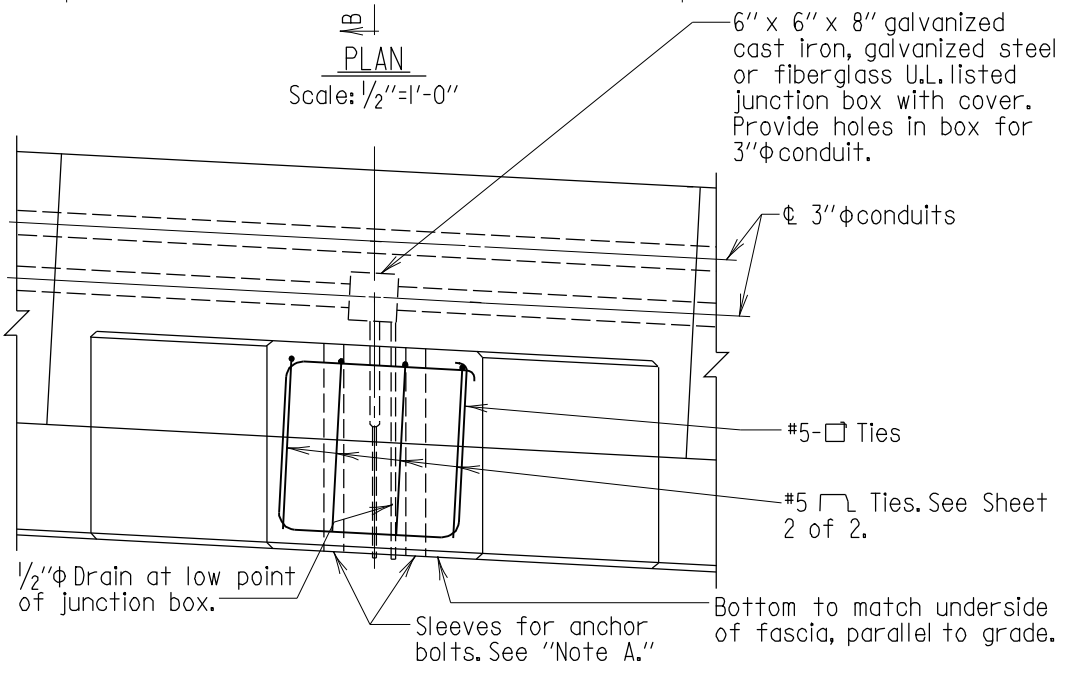
STANDARD NO. BR-SS(6.37)-05-247B SHEET 3 OF 3

SUPER-CONCRETE WORK



PLAN

Scale: 1/2"=1'-0"



SECTION A-A

Scale: 1/2"=1'-0"

For Section "B-B" see Sheet 2 of 2.

Note B:
Station for light post support bracket shown on Plans is only approximate. ℄ Bracket to be located midway between parapet control joints.
A = Normal parapet control joint spacing (adjust as necessary to meet minimum limitations).
If a light post is placed at ℄ of pier, eliminate the control joint at the ℄ of pier, The first control joint beyond, on one side only shall be changed to a paraffin joint.

Note:
Normal deck reinforcing steel not shown.

Note A:
Contractor is to contact the District Engineer in writing prior to placing sleeves for anchor bolts, to ascertain the bolt circle dimension and size of anchor bolts that will be used on this project. All light poles to be set plumb using leveling nuts on anchor bolts. Max. height of pole for this detail is 40'.

34'' STRAIGHT BACK

APPROVAL
E S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 3/26/91

REVISIONS	
SHA	FHWA
1-8-93	·
9-24-96	·
6-1-05	·
1-9-08	·

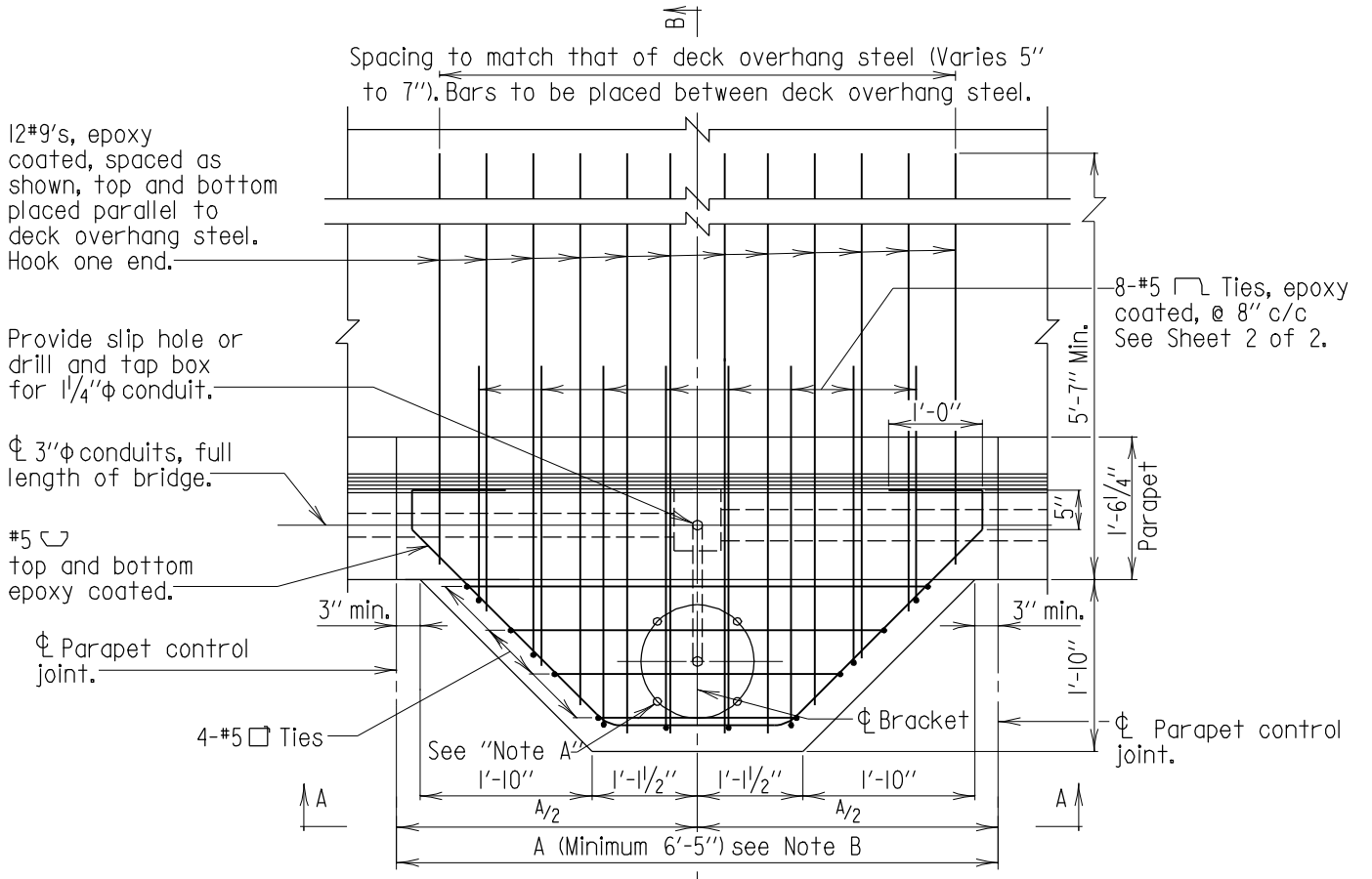
FHWA APPROVAL
DATE: .

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH DUAL CONDUITS AND 34" F-SHAPE PARAPET WITH STRAIGHT BACK

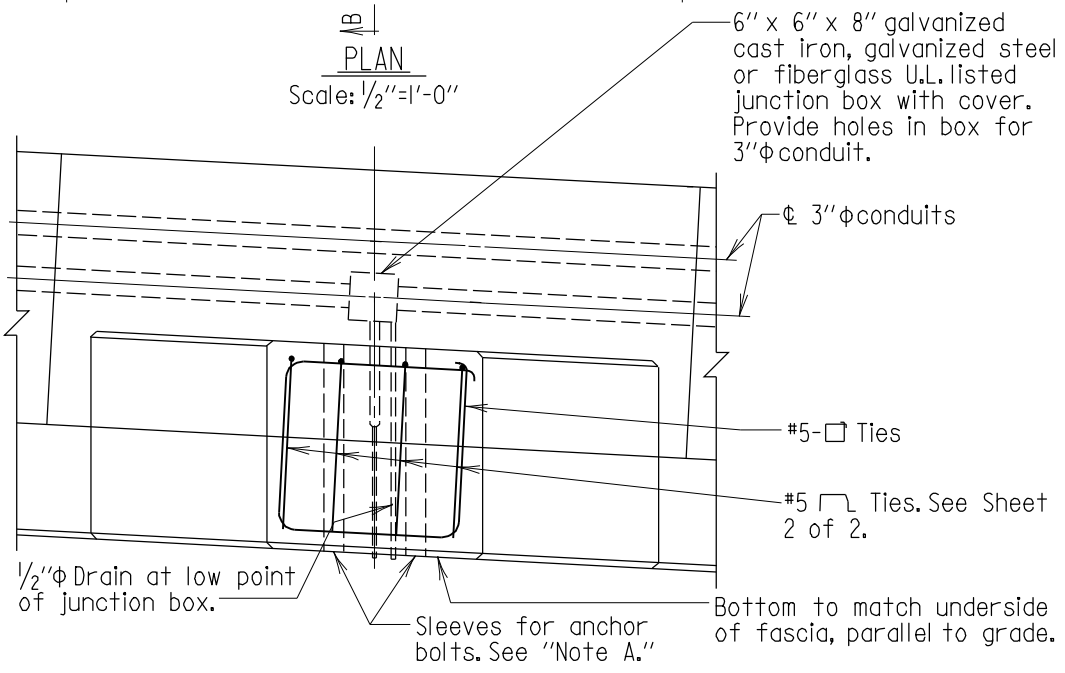
STANDARD NO. BR-SS(6.38)-05-248A SHEET 1 OF 2

SUPER-CONCRETE WORK



PLAN

Scale: 1/2"=1'-0"



SECTION A-A

Scale: 1/2"=1'-0"

For Section "B-B" see Sheet 2 of 2.

Note B:
Station for light post support bracket shown on Plans is only approximate. ℄ Bracket to be located midway between parapet control joints.
A = Normal parapet control joint spacing (adjust as necessary to meet minimum limitations).
If a light post is placed at ℄ of pier, eliminate the control joint at the ℄ of pier, The first control joint beyond, on one side only shall be changed to a paraffin joint.

Note:
Deck overhang reinforcing steel not shown.

Note A:
Contractor is to contact the District Engineer in writing prior to placing sleeves for anchor bolts, to ascertain the bolt circle dimension and size of anchor bolts that will be used on this project. All light poles to be set plumb using leveling nuts on anchor bolts. Max. height of pole for this detail is 40'.

34'' STRAIGHT BACK

APPROVAL
E S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 3/26/91

REVISIONS	
SHA	FHWA
9-24-96	·
6-1-05	·
10-9-07	·
1-9-08	·

FHWA APPROVAL	
DATE:	

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

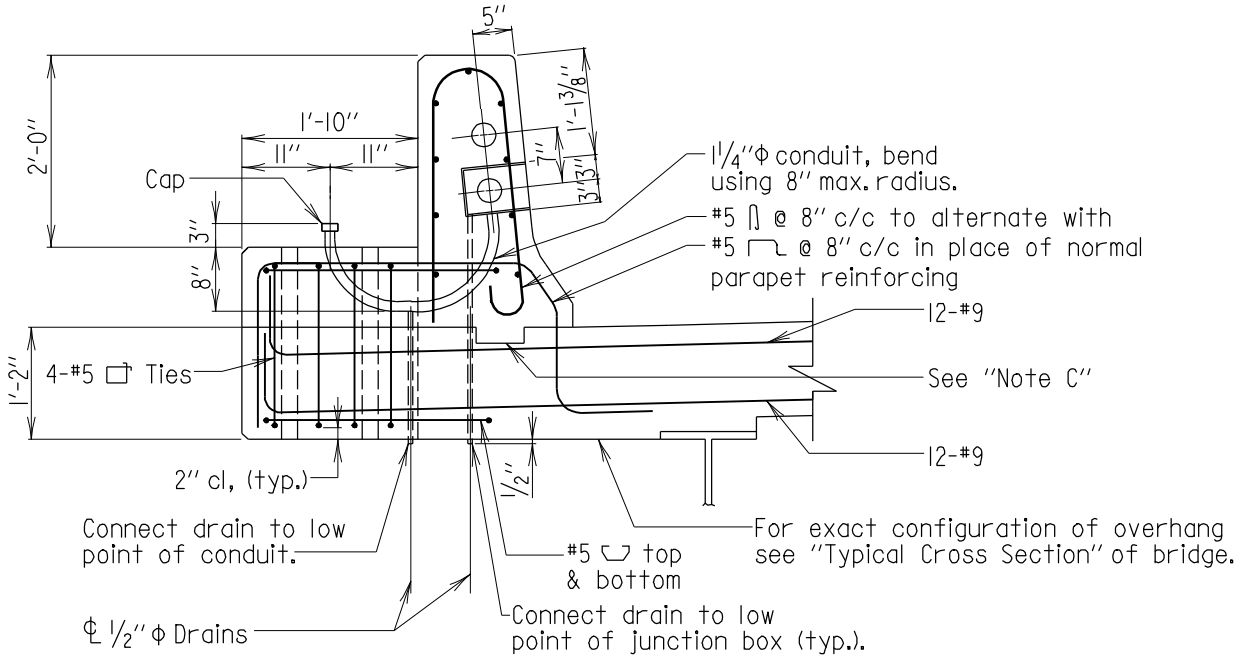
VERIFIED 10-9-2007 LRFD

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH DUAL CONDUITS AND 34" F-SHAPE PARAPET WITH STRAIGHT BACK

STANDARD NO. BR-SS(6.38)-05-248A(L) SHEET 1 OF 2

SUPER-CONCRETE WORK

Note:
Conduit, drain tubes and cap
may be galvanized steel or PVC.



SECTION B-B FOR ''F-SHAPE'' BARRIER

Scale: 1/2''=1'-0''

Note:
All longitudinal bars are #5's and shall be placed continuously in the parapet from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multispan bridge. Refer to BR-SS(6.02)-03-27A.

Note C:
The constr. jt. between the F-shape parapet and the deck may vary slightly from the joint indicated. For exact details and location of the joint see ''Superstructure'' Sheet.

34'' STRAIGHT BACK

APPROVAL
E S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 3/26/91

REVISIONS	
SHA	FHWA
1-8-93	·
9-24-96	·
8-7-98	·
6-1-05	·

FHWA APPROVAL
DATE: .

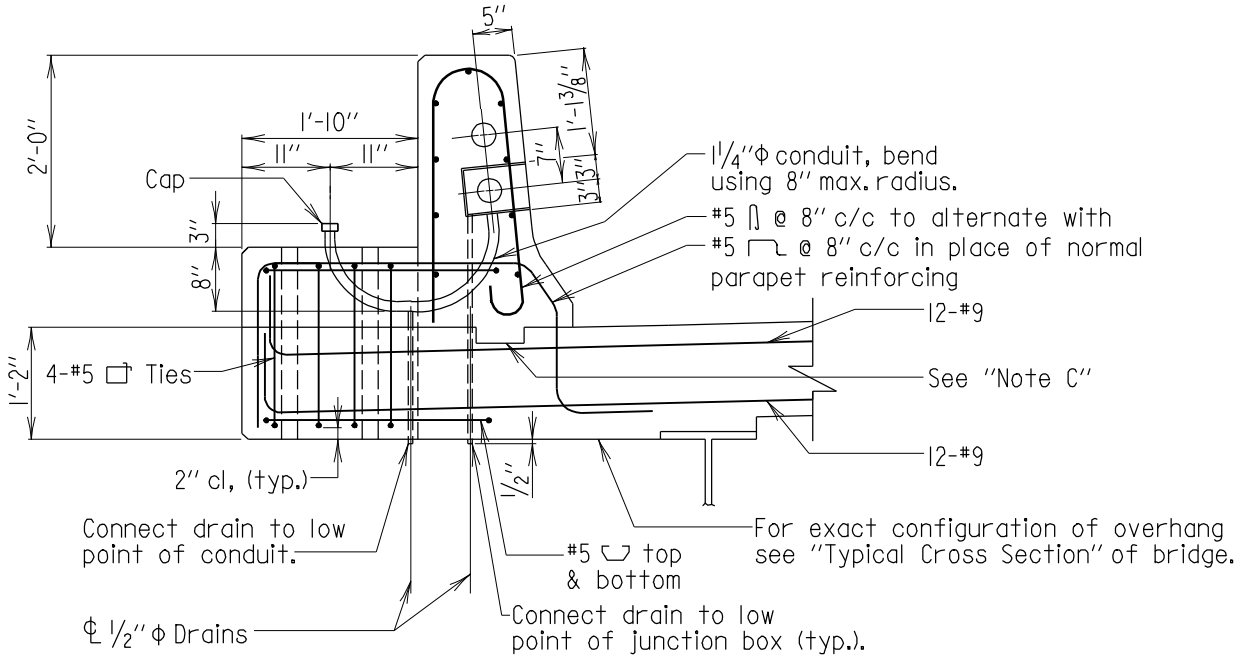
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH DUAL CONDUITS AND 34'' F-SHAPE PARAPET WITH STRAIGHT BACK

STANDARD NO. BR-SS(6.38)-05-248A SHEET 2 OF 2

SUPER-CONCRETE WORK

Note:
Conduit, drain tubes and cap
may be galvanized steel or PVC.



SECTION B-B FOR ''F-SHAPE'' BARRIER

Scale: ½''=1'-0''

Note:
All longitudinal bars are #5's and shall be placed continuously in the parapet from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multispan bridge. Refer to BR-SS(6.02)-03-27A.

Note C:
The constr. jt. between the F-shape parapet and the deck may vary slightly from the joint indicated. For exact details and location of the joint see ''Superstructure'' Sheet.

34'' STRAIGHT BACK

APPROVAL
E S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 3/26/91

REVISIONS	
SHA	FHWA
9-24-96	·
8-7-98	·
6-1-05	·
10-9-07	·

FHWA APPROVAL
DATE: .

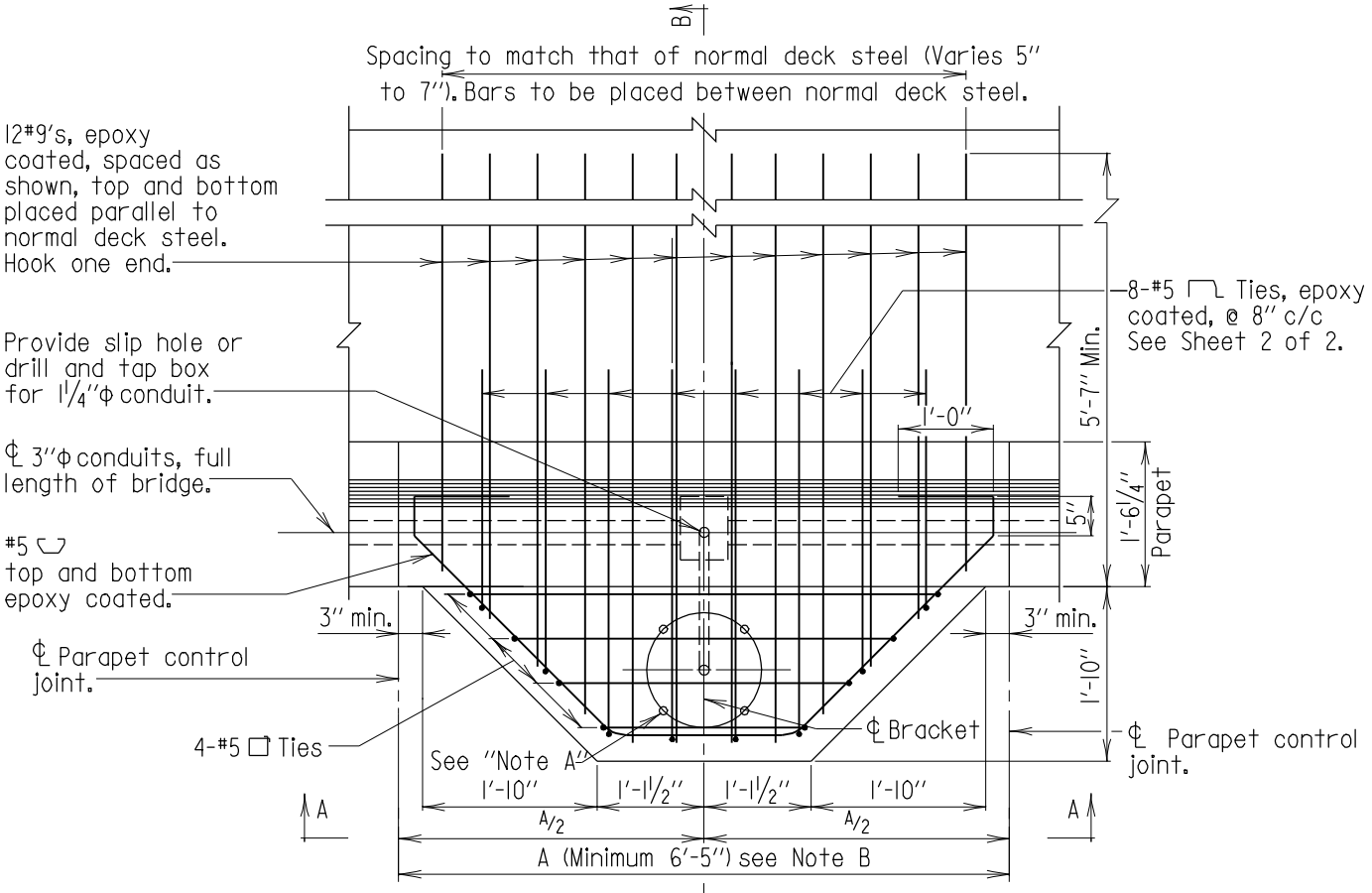
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

VERIFIED 10-9-2007 LRFD

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH DUAL CONDUITS AND 34'' F-SHAPE PARAPET WITH STRAIGHT BACK

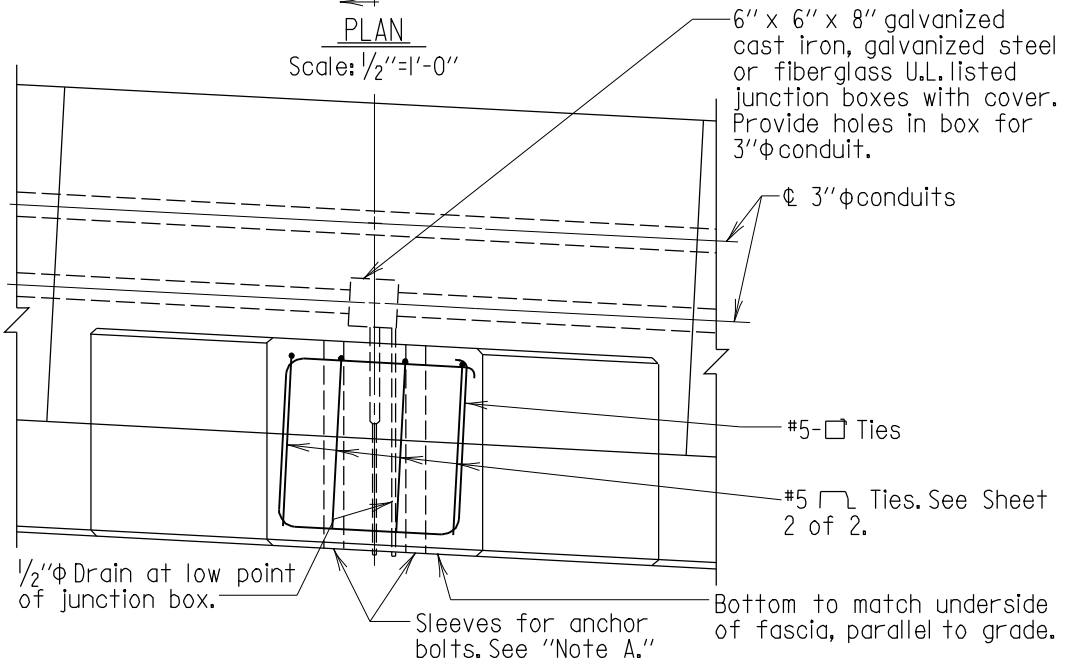
STANDARD NO. BR-SS(6.38)-05-248A(L) SHEET 2 OF 2

SUPER-CONCRETE WORK



PLAN

Scale: ½"=1'-0"



Note B:
Station for light post support bracket shown on Plans is only approximate. ℄ Bracket to be located midway between parapet control joints.
A = Normal parapet control joint spacing (adjust as necessary to meet minimum limitations).
If a light post is placed at ℄ of pier, eliminate the control joint at the ℄ of pier, The first control joint beyond, on one side only shall be changed to a paraffin joint.

SECTION A-A

Scale: ½"=1'-0"

For Section "B-B" see Sheet 2 of 2.

Note:
Normal deck reinforcing steel not shown.

Note A:
Contractor is to contact the District Engineer in writing prior to placing sleeves for anchor bolts, to ascertain the bolt circle dimension and size of anchor bolts that will be used on this project. All light poles to be set plumb using leveling nuts on anchor bolts. Max. height of pole for this detail is 40'.

42'' STRAIGHT BACK

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
1-9-08	·
·	·
·	·
·	·

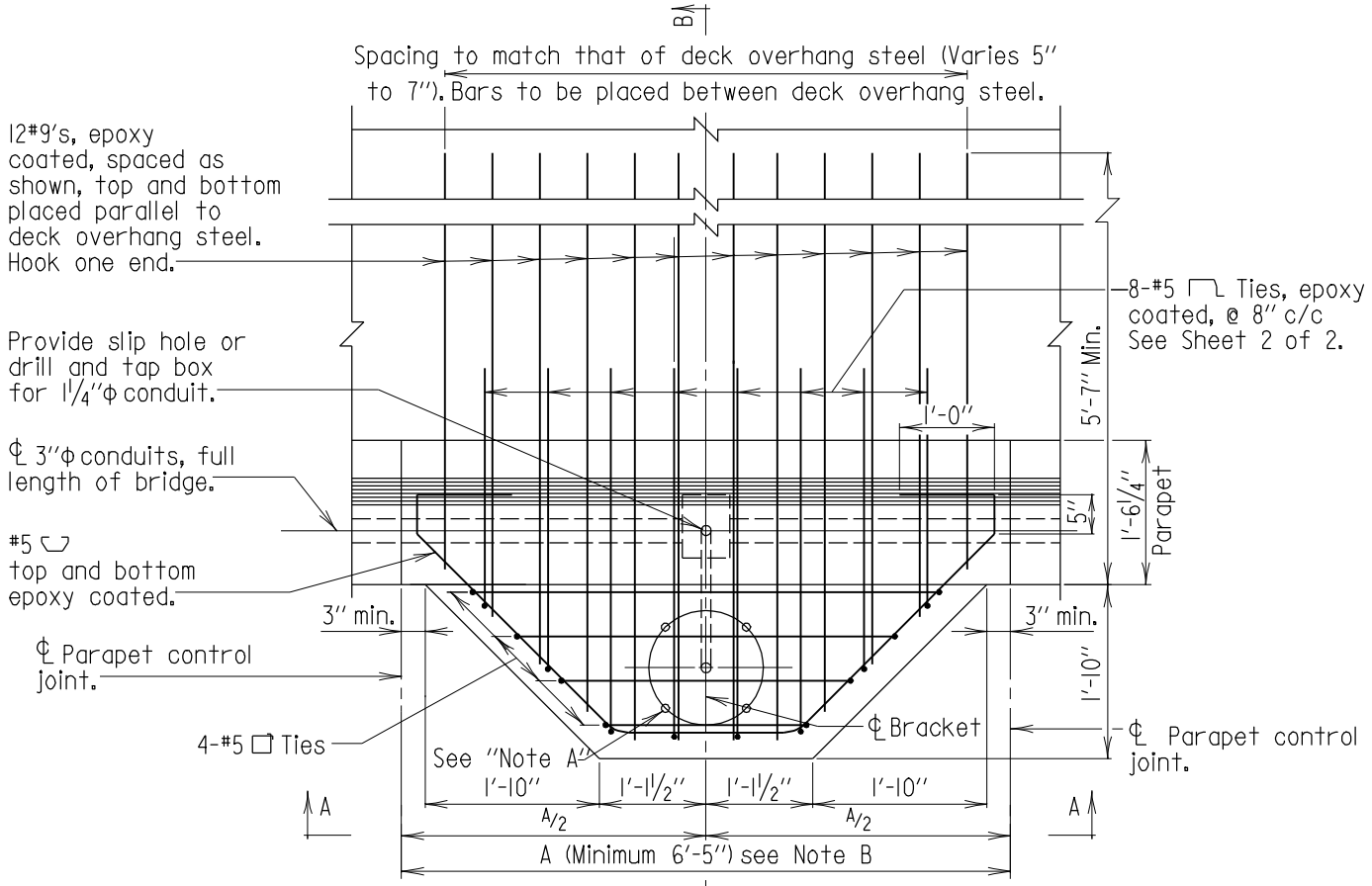
FHWA APPROVAL
DATE: ·

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH DUAL CONDUITS AND 42" F-SHAPE PARAPET WITH STRAIGHT BACK

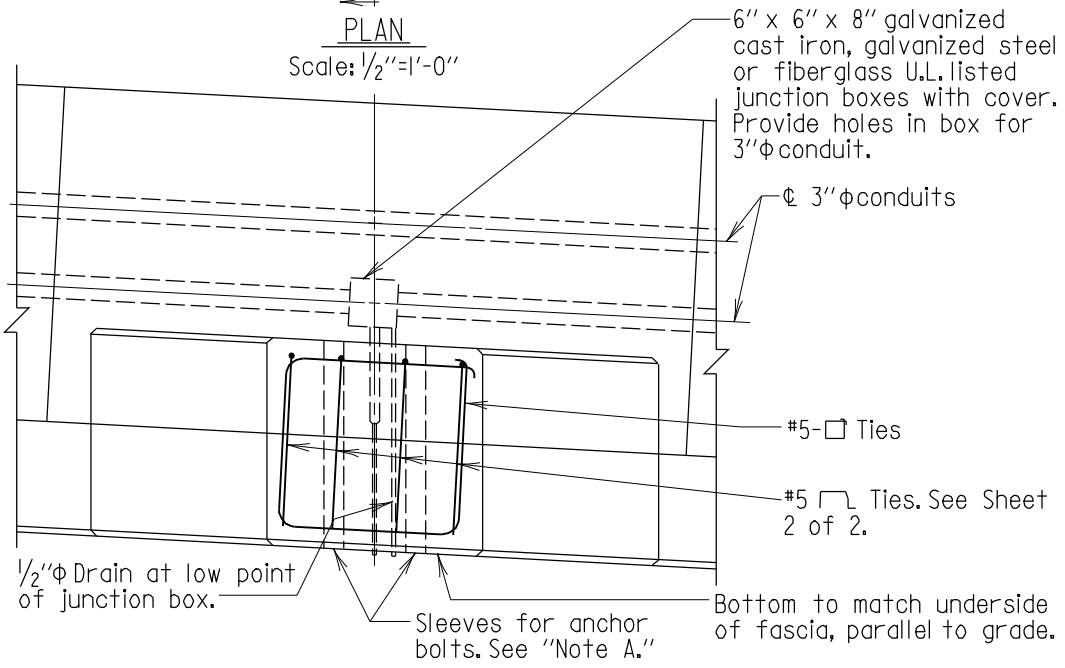
STANDARD NO. BR-SS(6.38)-05-248B SHEET 1 OF 2

SUPER-CONCRETE WORK



PLAN

Scale: ½"=1'-0"



Note B:
Station for light post support bracket shown on Plans is only approximate. ℄ Bracket to be located midway between parapet control joints.
A = Normal parapet control joint spacing (adjust as necessary to meet minimum limitations).
If a light post is placed at ℄ of pier, eliminate the control joint at the ℄ of pier, The first control joint beyond, on one side only shall be changed to a paraffin joint.

Note:
Deck overhang reinforcing steel not shown.

Note A:
Contractor is to contact the District Engineer in writing prior to placing sleeves for anchor bolts, to ascertain the bolt circle dimension and size of anchor bolts that will be used on this project. All light poles to be set plumb using leveling nuts on anchor bolts. Max. height of pole for this detail is 40'.

SECTION A-A

Scale: ½"=1'-0"

For Section "B-B" see Sheet 2 of 2.

42" STRAIGHT BACK

APPROVAL
E S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
10-9-07	·
1-9-08	·
·	·
·	·

FHWA APPROVAL		
DATE:	·	·

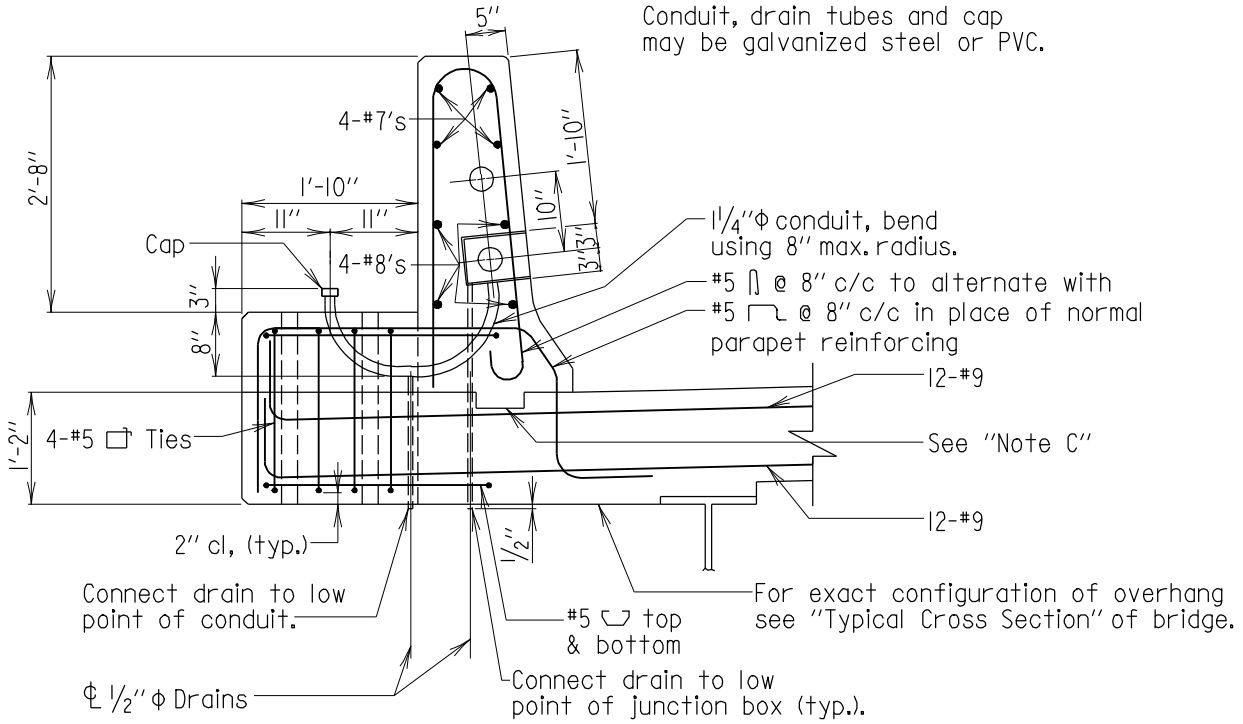
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

VERIFIED 10-9-2007 LRFD

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH DUAL CONDUITS AND 42" F-SHAPE PARAPET WITH STRAIGHT BACK

STANDARD NO. BR-SS(6.38)-05-248B(L) SHEET 1 OF 2

SUPER-CONCRETE WORK



SECTION B-B FOR ''F-SHAPE'' BARRIER

Scale: ½''=1'-0''

Note:
All #7 and #8 bars shall be placed continuously in the parapet from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multispan bridge. Refer to BR-SS(6.02)-03-27B.

Note C:
The constr. jt. between the F-shape parapet and the deck may vary slightly from the joint indicated. For exact details and location of the joint see ''Superstructure'' Sheet.

42'' STRAIGHT BACK

APPROVAL
C S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA

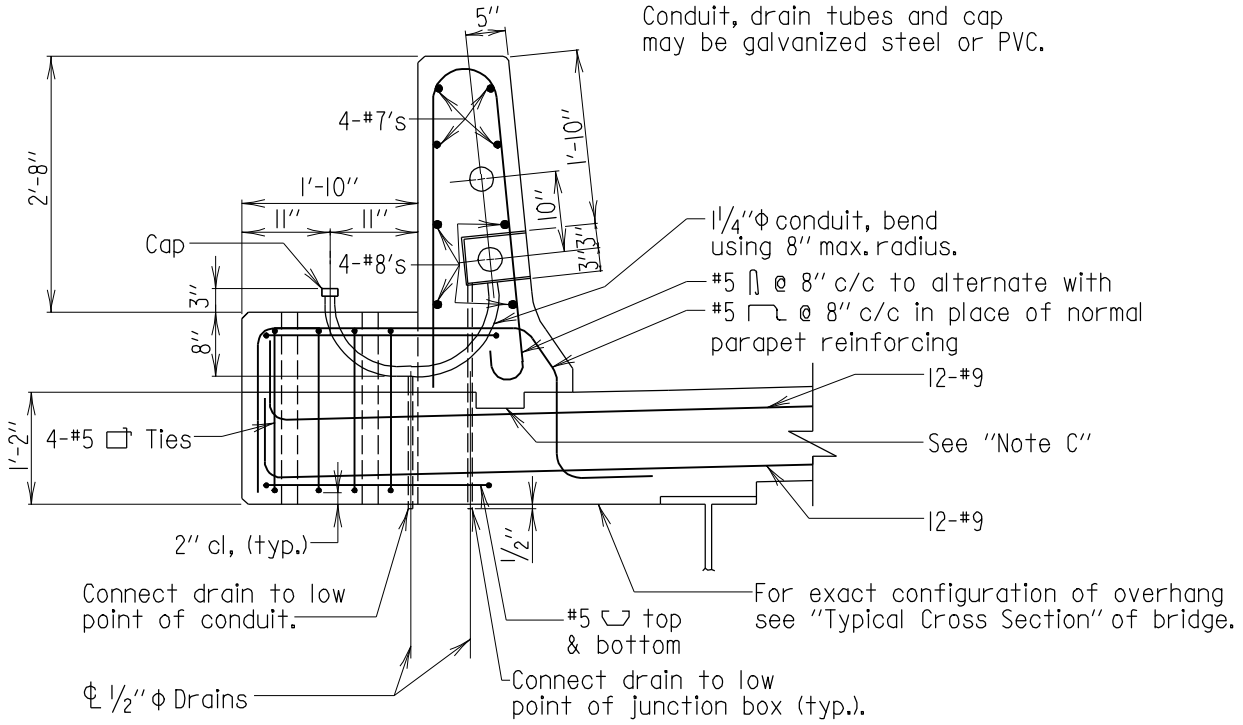
FHWA APPROVAL
DATE:

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH DUAL CONDUITS AND 42'' F-SHAPE PARAPET WITH STRAIGHT BACK

STANDARD NO. BR-SS(6.38)-05-248B SHEET 2 OF 2

SUPER-CONCRETE WORK



SECTION B-B FOR ''F-SHAPE'' BARRIER

Scale: ½''=1'-0''

Note:
All #7 and #8 bars shall be placed continuously in the parapet from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multispan bridge. Refer to BR-SS(6.02)-03-27B.

Note C:
The constr. jt. between the F-shape parapet and the deck may vary slightly from the joint indicated. For exact details and location of the joint see ''Superstructure'' Sheet.

42'' STRAIGHT BACK

APPROVAL
C S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
10-9-07	·
·	·
·	·
·	·

FHWA APPROVAL
DATE: ·

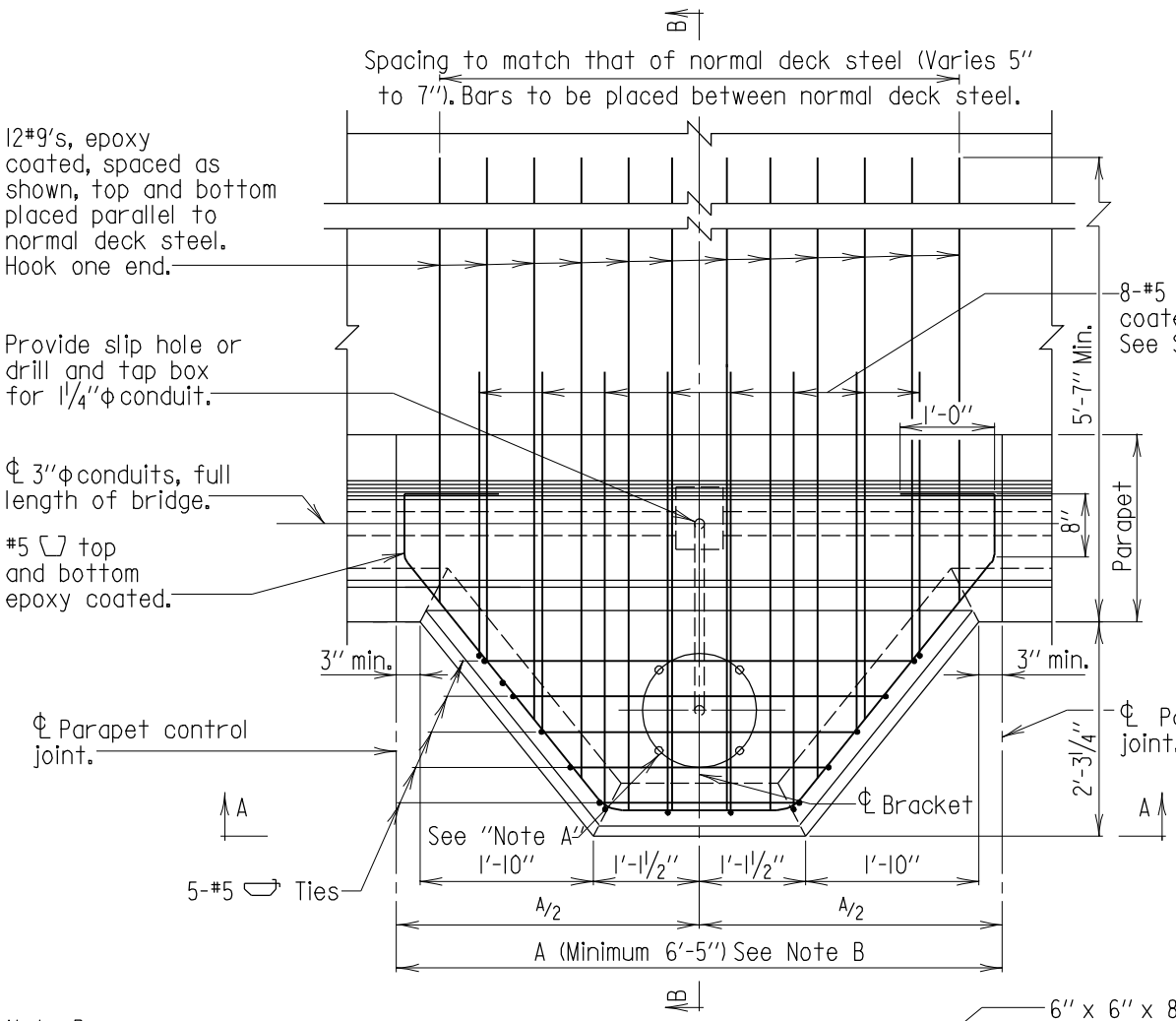
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

VERIFIED 10-9-2007 LRFD

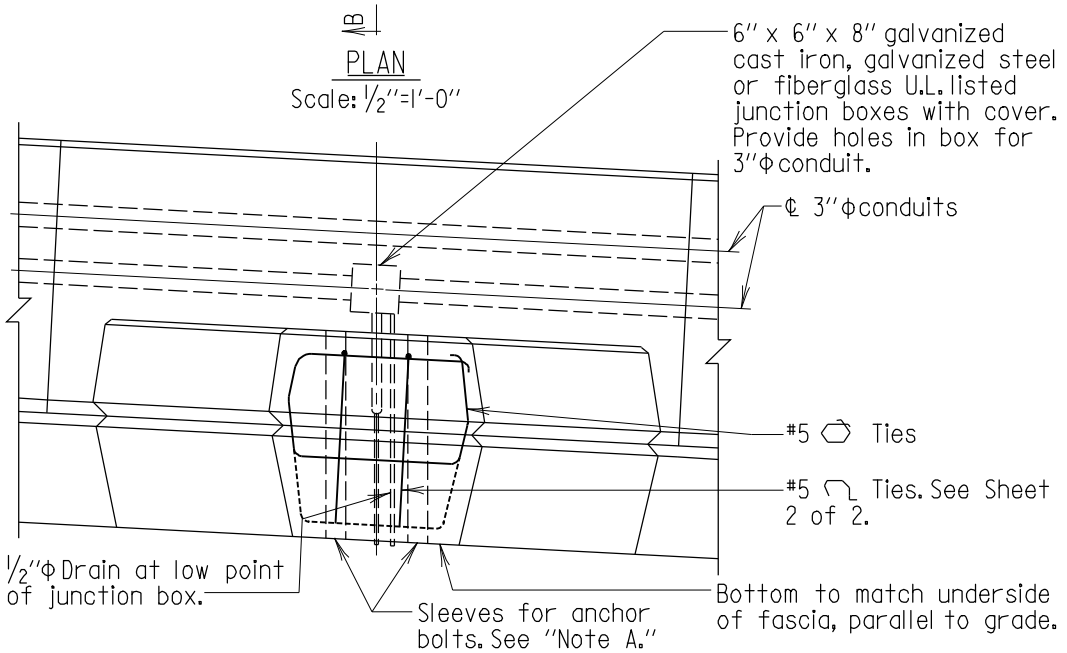
SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH DUAL CONDUITS AND 42'' F-SHAPE PARAPET WITH STRAIGHT BACK

STANDARD NO. BR-SS(6.38)-05-248B(L) SHEET 2 OF 2

SUPER-CONCRETE WORK



PLAN
Scale: 1/2"=1'-0"



SECTION A-A
Scale: 1/2"=1'-0"

For Section "B-B" see Sheet 2 of 2.

34'' DIAMOND BACK

Note B:
Station for light post support bracket shown on Plans is only approximate. ℄ Bracket to be located midway between parapet control joints.
A= Normal parapet contol joint spacing (Adjust as necessary to meet minimum limitations).
If a light post is placed at ℄ of pier, eliminate the control joint at the ℄ of pier, The first control joint beyond, on one side only shall be changed to a paraffin joint.

Note:
Normal deck reinforcing steel not shown.

Note A:
Contractor is to contact the District Engineer in writing prior to placing sleeves for anchor bolts, to ascertain the bolt circle dimension and size of anchor bolts that will be used on this project. All light poles to be set plumb using leveling nuts on anchor bolts. Max. height of pole for this detail is 40'.

APPROVAL
C S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 3/26/91

REVISIONS	
SHA	FHWA
1-8-93	·
9-24-96	·
6-1-05	·
1-9-08	·

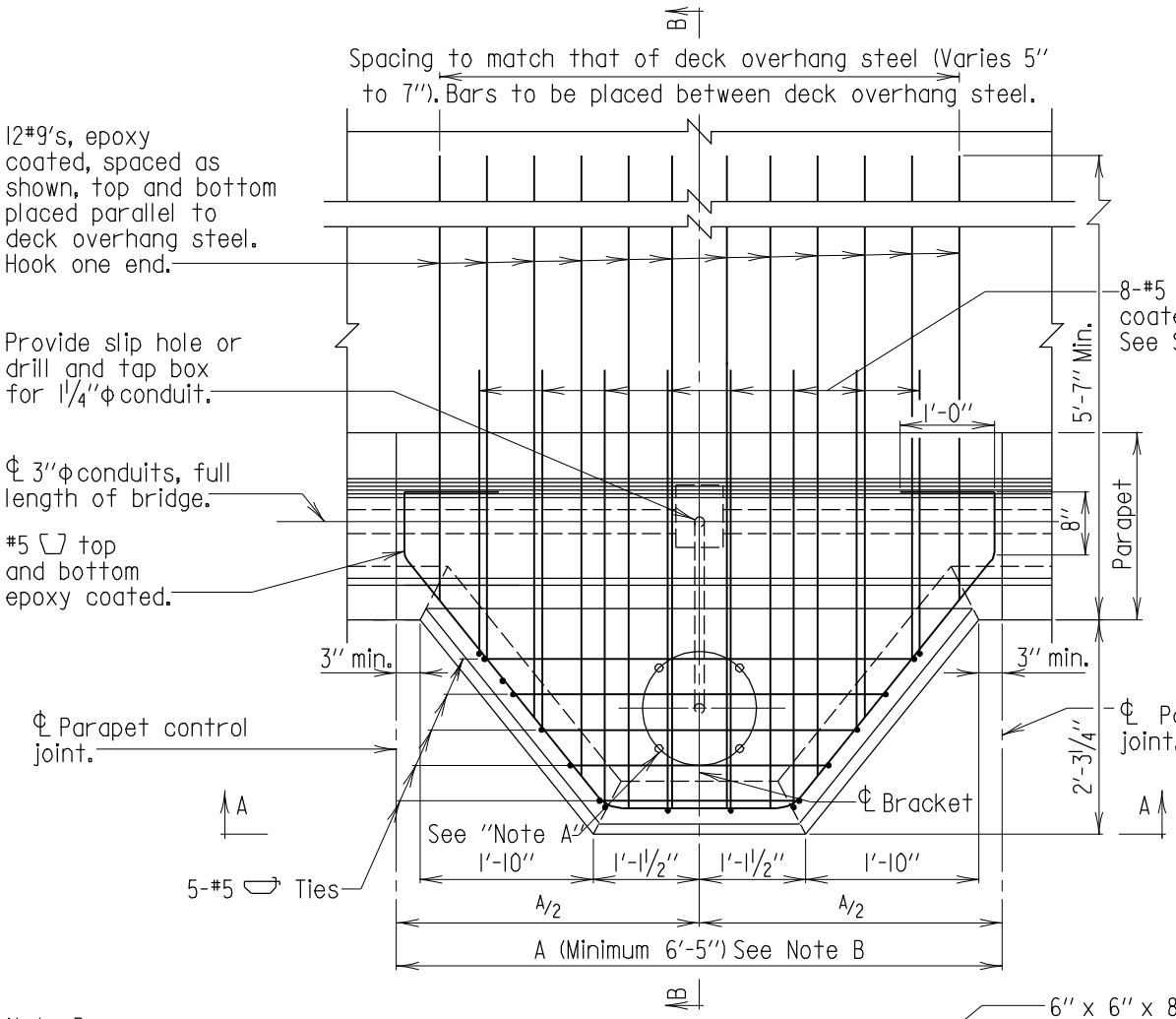
FHWA APPROVAL
DATE: .

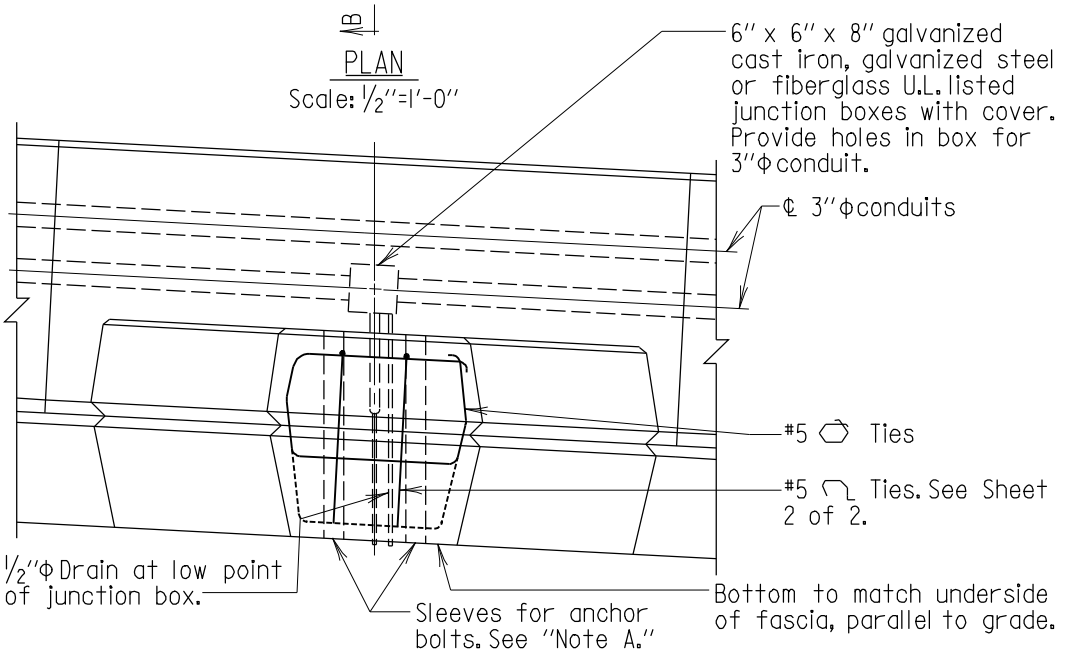
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH DUAL CONDUITS AND 34" F-SHAPE PARAPET WITH DIAMOND BACK

STANDARD NO. BR-SS(6.40)-05-250A SHEET 1 OF 2

SUPER-CONCRETE WORK





Note B:
Station for light post support bracket shown on Plans is only approximate. ℄ Bracket to be located midway between parapet control joints.
A= Normal parapet contol joint spacing (Adjust as necessary to meet minimum limitations).
If a light post is placed at ℄ of pier, eliminate the control joint at the ℄ of pier, The first control joint beyond, on one side only shall be changed to a paraffin joint.

Note:
Deck overhang reinforcing steel not shown.

Note A:
Contractor is to contact the District Engineer in writing prior to placing sleeves for anchor bolts, to ascertain the bolt circle dimension and size of anchor bolts that will be used on this project. All light poles to be set plumb using leveling nuts on anchor bolts. Max. height of pole for this detail is 40'.

SECTION A-A
Scale: 1/2"=1'-0"

For Section "B-B" see Sheet 2 of 2.

34" DIAMOND BACK

APPROVAL
C S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 3/26/91

REVISIONS	
SHA	FHWA
9-24-96	·
6-1-05	·
10-9-07	·
1-9-08	·

FHWA APPROVAL
DATE: .

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

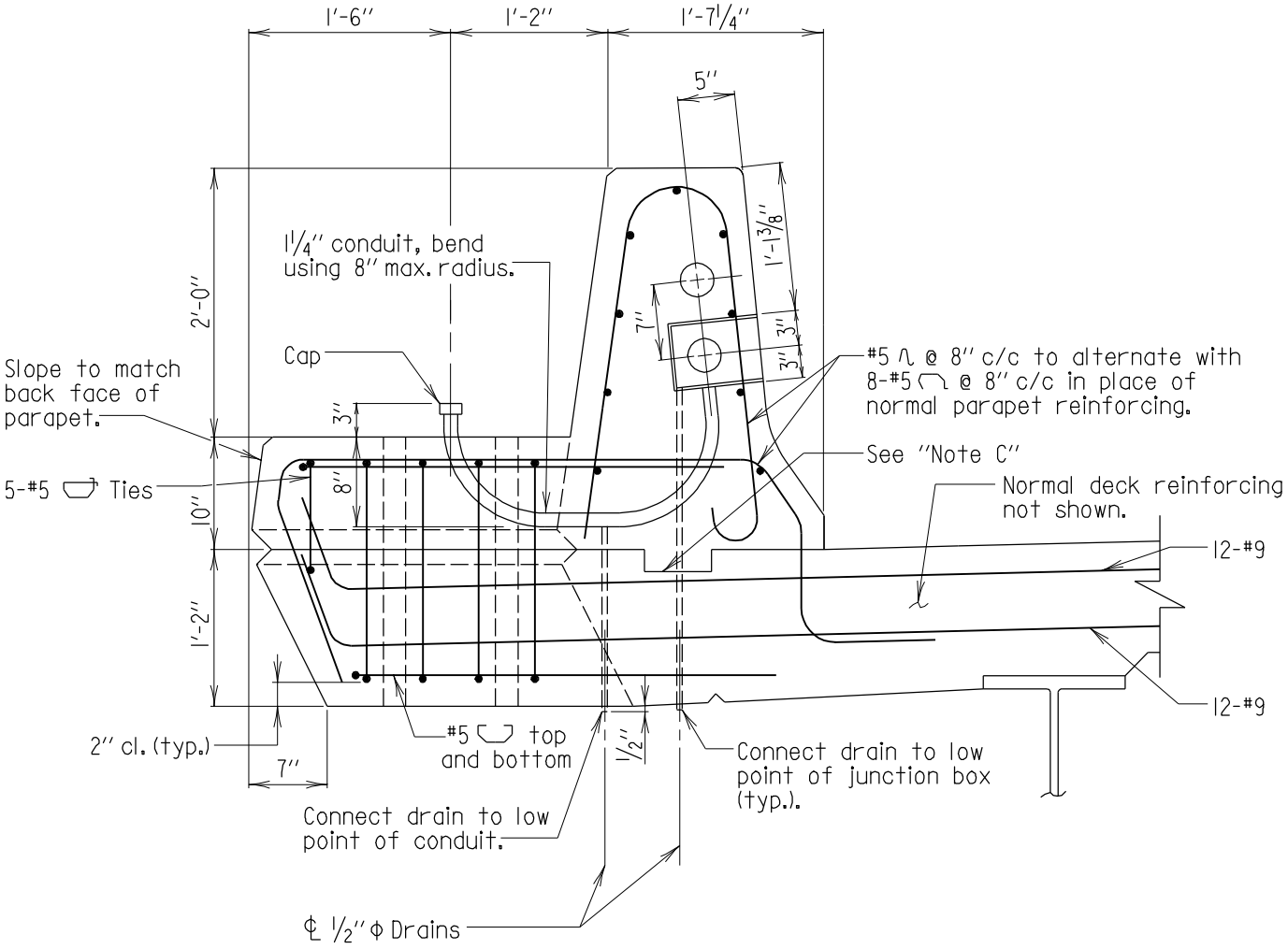
VERIFIED 10-9-2007 LRFD

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH DUAL CONDUITS AND 34" F-SHAPE PARAPET WITH DIAMOND BACK

STANDARD NO. BR-SS(6.40)-05-250A(L) SHEET 1 OF 2

SUPER-CONCRETE WORK

Note:
Conduit, drain tubes and cap may be galvanized steel or PVC.



SECTION B-B
Scale: 3/4"=1'-0"

Note:
All longitudinal bars are #5's and shall be placed continuously in the parapet from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multispan bridge. Refer to BR-SS(6.25)-03-159A.

Note C:
The constr. jt. between the F-shape parapet and the deck may vary slightly from the joint indicated. For exact details and location of the joint see "Superstructure" Sheet.

34'' DIAMOND BACK

APPROVAL
C.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 3/26/91

REVISIONS	
SHA	FHWA
1-8-93	·
9-24-96	·
6-1-05	·
·	·

FHWA APPROVAL
DATE: .

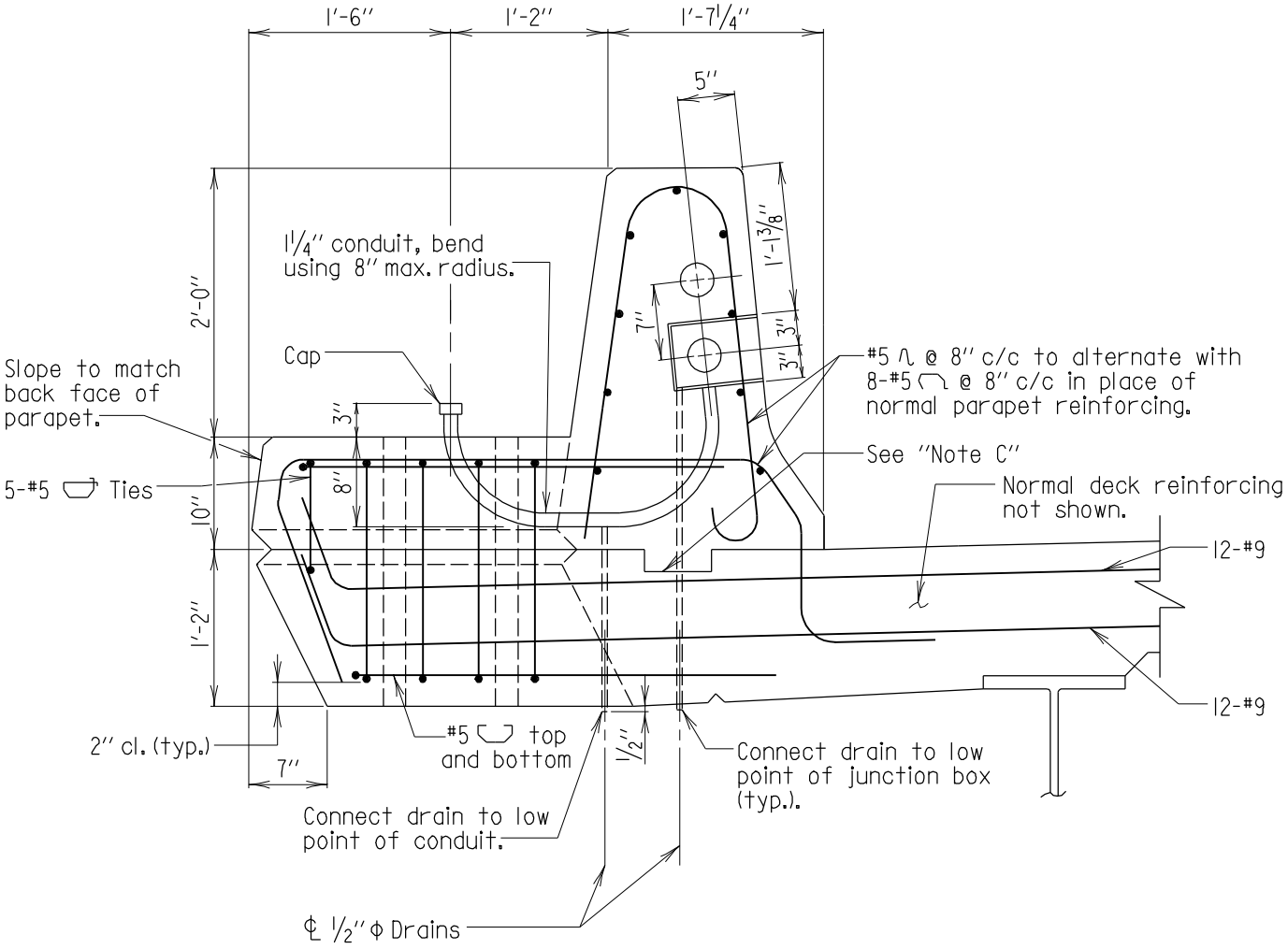
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH DUAL CONDUITS AND 34" F-SHAPE PARAPET WITH DIAMOND BACK

STANDARD NO. BR-SS(6.40)-05-250A SHEET 2 OF 2

SUPER-CONCRETE WORK

Note:
Conduit, drain tubes and cap may be galvanized steel or PVC.



SECTION B-B
Scale: 3/4"=1'-0"

Note:
All longitudinal bars are #5's and shall be placed continuously in the parapet from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multispan bridge. Refer to BR-SS(6.25)-03-159A.

Note C:
The constr. jt. between the F-shape parapet and the deck may vary slightly from the joint indicated. For exact details and location of the joint see "Superstructure" Sheet.

34'' DIAMOND BACK

APPROVAL
C.S. Friedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 3/26/91

REVISIONS	
SHA	FHWA
1-8-93	·
9-24-96	·
6-1-05	·
10-9-07	·

FHWA APPROVAL
DATE: .

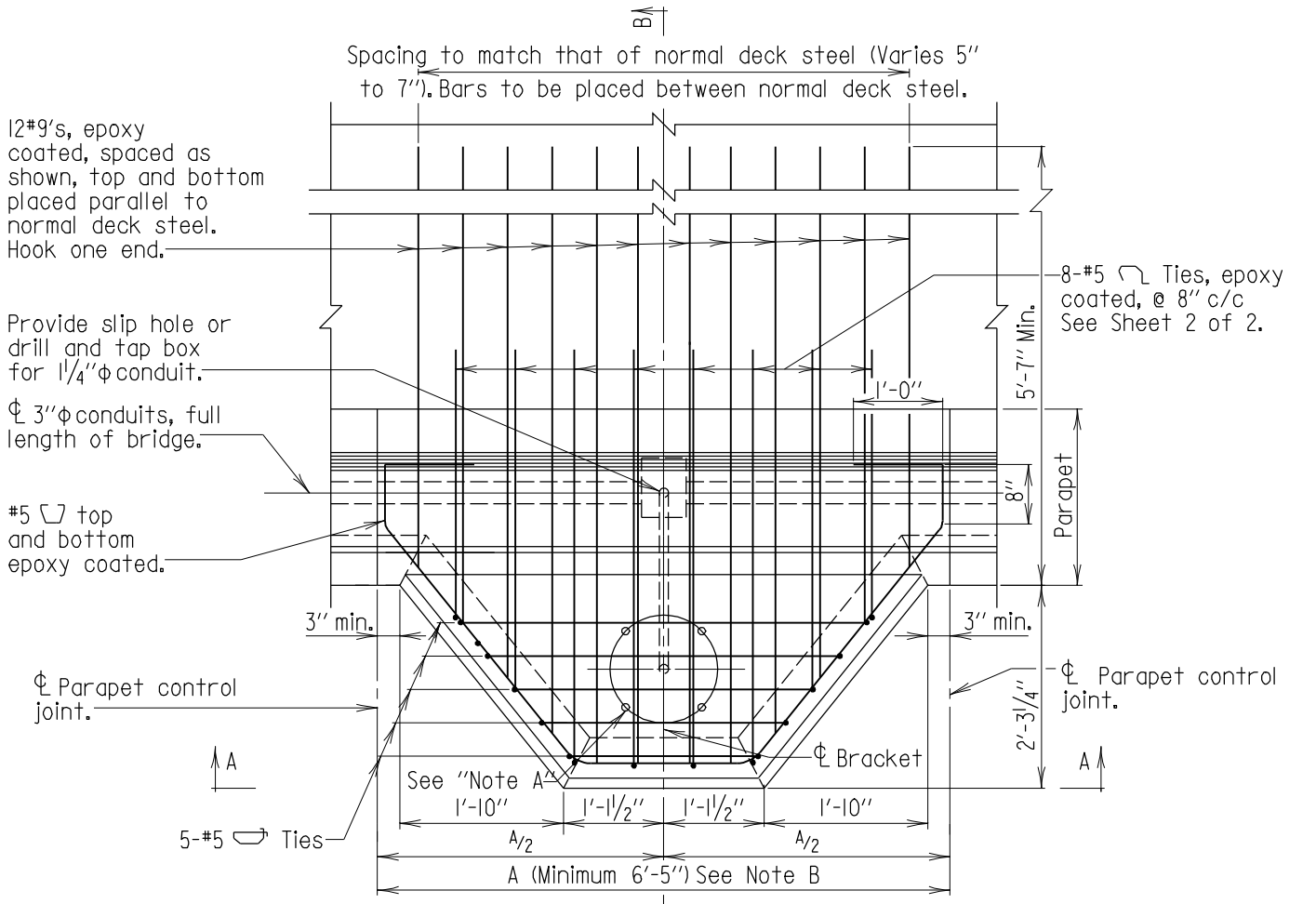
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

VERIFIED 10-9-2007 LRFD

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH DUAL CONDUITS AND 34" F-SHAPE PARAPET WITH DIAMOND BACK

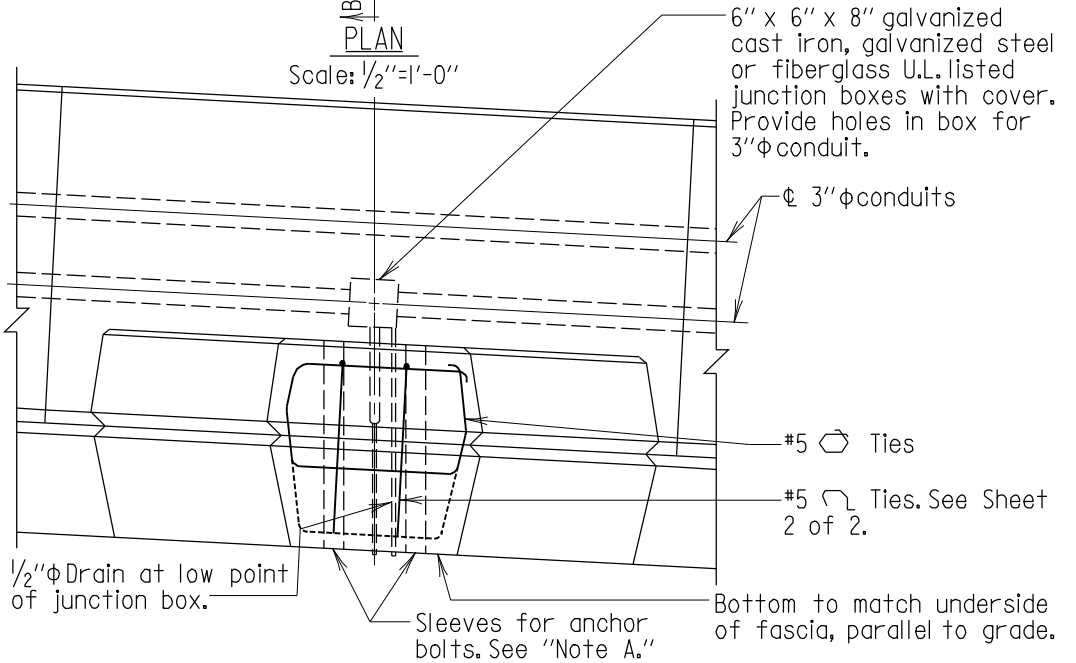
STANDARD NO. BR-SS(6.40)-05-250A(L) SHEET 2 OF 2

SUPER-CONCRETE WORK



PLAN

Scale: 1/2"=1'-0"



Note B:
Station for light post support bracket shown on Plans is only approximate. ℄ Bracket to be located midway between parapet control joints.
A= Normal parapet contol joint spacing (Adjust as necessary to meet minimum limitations).
If a light post is placed at ℄ of pier, eliminate the control joint at the ℄ of pier, The first control joint beyond, on one side only shall be changed to a paraffin joint.

Note:
Normal deck reinforcing steel not shown.

Note A:
Contractor is to contact the District Engineer in writing prior to placing sleeves for anchor bolts, to ascertain the bolt circle dimension and size of anchor bolts that will be used on this project. All light poles to be set plumb using leveling nuts on anchor bolts. Max. height of pole for this detail is 40'.

SECTION A-A

Scale: 1/2"=1'-0"

For Section "B-B" see Sheet 2 of 2.

42'' DIAMOND BACK

APPROVAL
E S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
1-9-08	·
·	·
·	·
·	·

FHWA APPROVAL
DATE: .

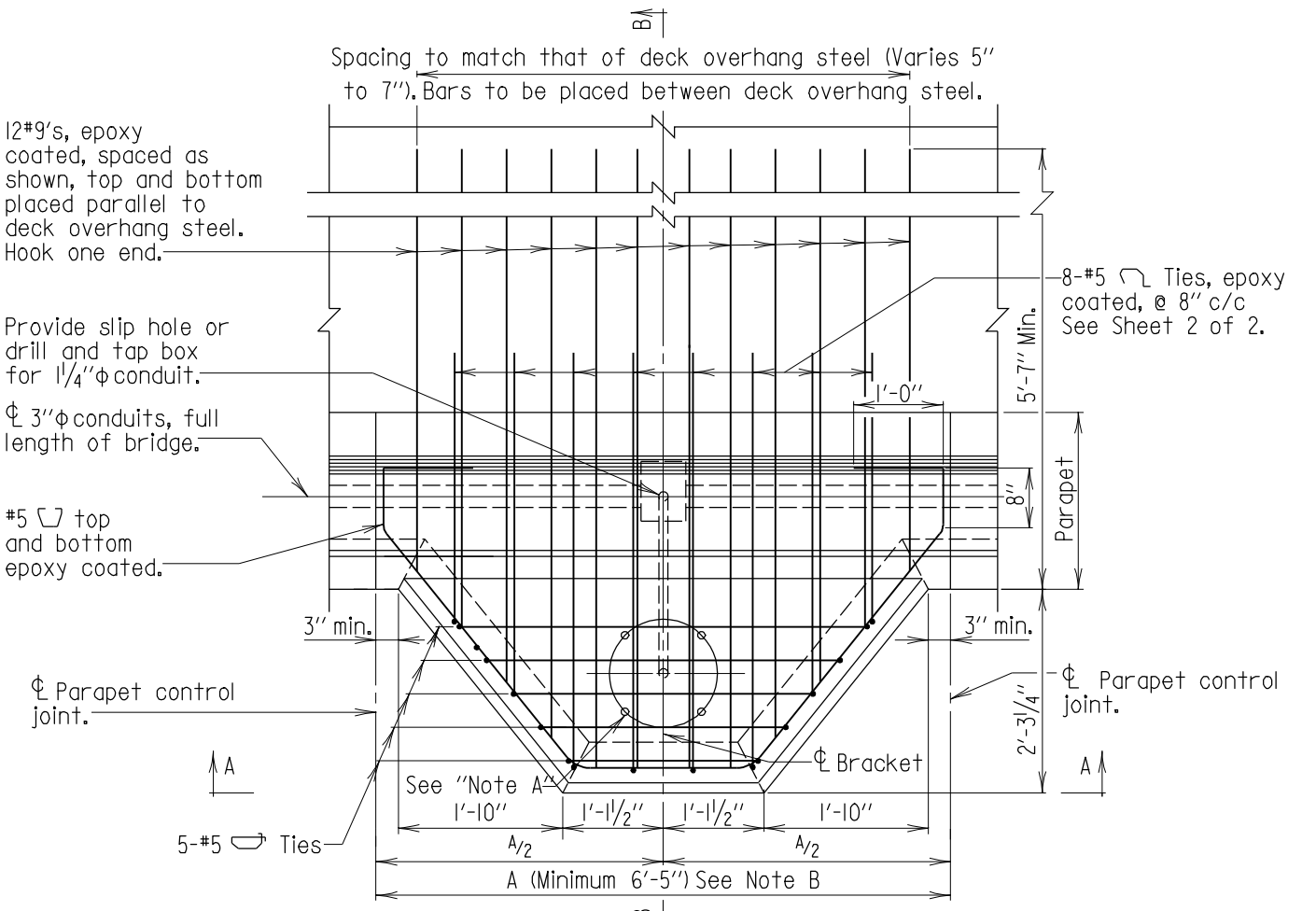
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH DUAL CONDUITS AND 42'' F-SHAPE PARAPET WITH DIAMOND BACK

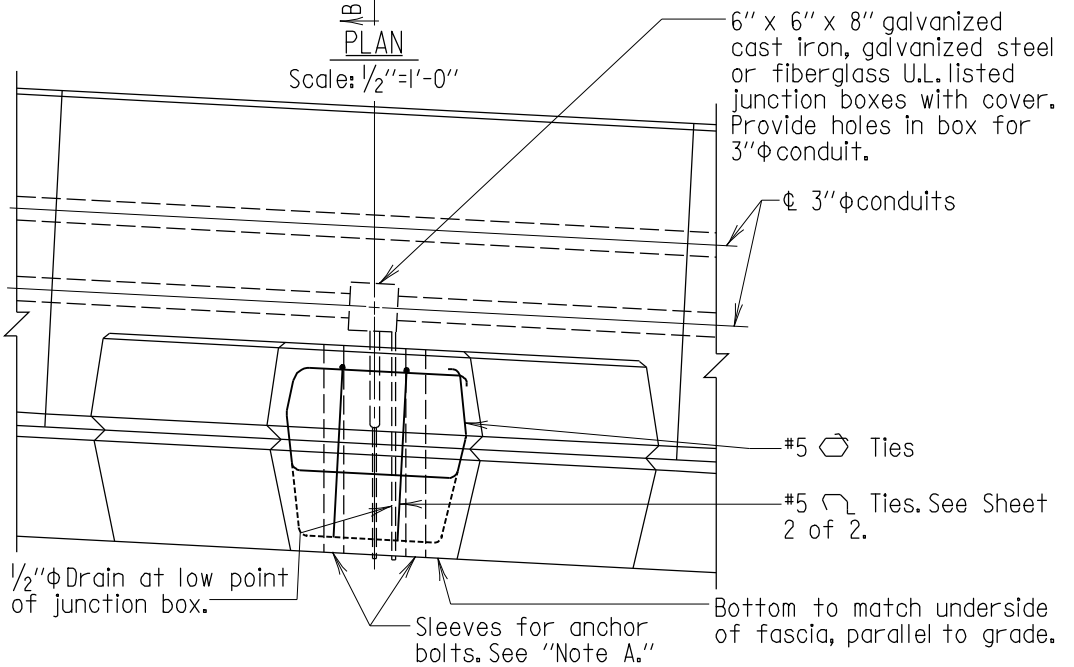
STANDARD NO. BR-SS(6.40)-05-250B

SHEET 1 OF 2

SUPER-CONCRETE WORK



PLAN
Scale: 1/2"=1'-0"



Note B:
Station for light post support bracket shown on Plans is only approximate. ℄ Bracket to be located midway between parapet control joints.
A= Normal parapet contol joint spacing (Adjust as necessary to meet minimum limitations).
If a light post is placed at ℄ of pier, eliminate the control joint at the ℄ of pier, The first control joint beyond, on one side only shall be changed to a paraffin joint.

Note:
Deck overhang reinforcing steel not shown.

Note A:
Contractor is to contact the District Engineer in writing prior to placing sleeves for anchor bolts, to ascertain the bolt circle dimension and size of anchor bolts that will be used on this project. All light poles to be set plumb using leveling nuts on anchor bolts. Max. height of pole for this detail is 40'.

SECTION A-A
Scale: 1/2"=1'-0"

For Section "B-B" see Sheet 2 of 2.

42'' DIAMOND BACK

APPROVAL
C S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
10-9-07	·
1-9-08	·

FHWA APPROVAL		
DATE: .	·	·

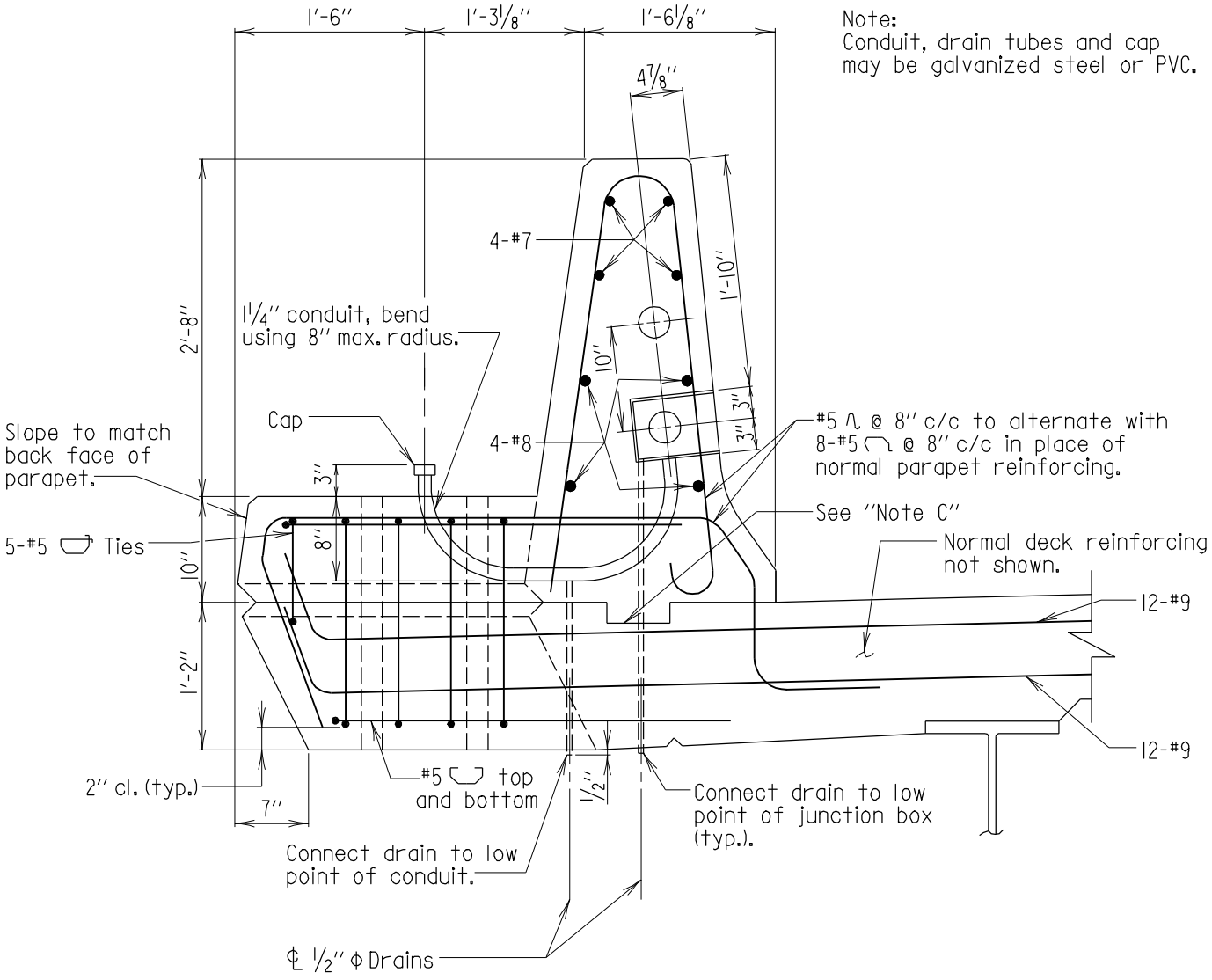
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

VERIFIED 10-9-2007 LRFD

SUPER-CONCRETE WORK

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH DUAL CONDUITS AND 42'' F-SHAPE PARAPET WITH DIAMOND BACK

STANDARD NO. BR-SS(6.40)-05-250B(L) SHEET 1 OF 2



Note:
Conduit, drain tubes and cap may be galvanized steel or PVC.

SECTION B-B
Scale: 3/4"=1'-0"

Note:
All #7 and #8 bars shall be placed continuously in the parapet from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multispan bridge. Refer to BR-SS(6.25)-03-159B.

Note C:
The constr. jt. between the F-shape parapet and the deck may vary slightly from the joint indicated. For exact details and location of the joint see "Superstructure" Sheet.

42'' DIAMOND BACK

APPROVAL
E S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
.	.
.	.
.	.
.	.

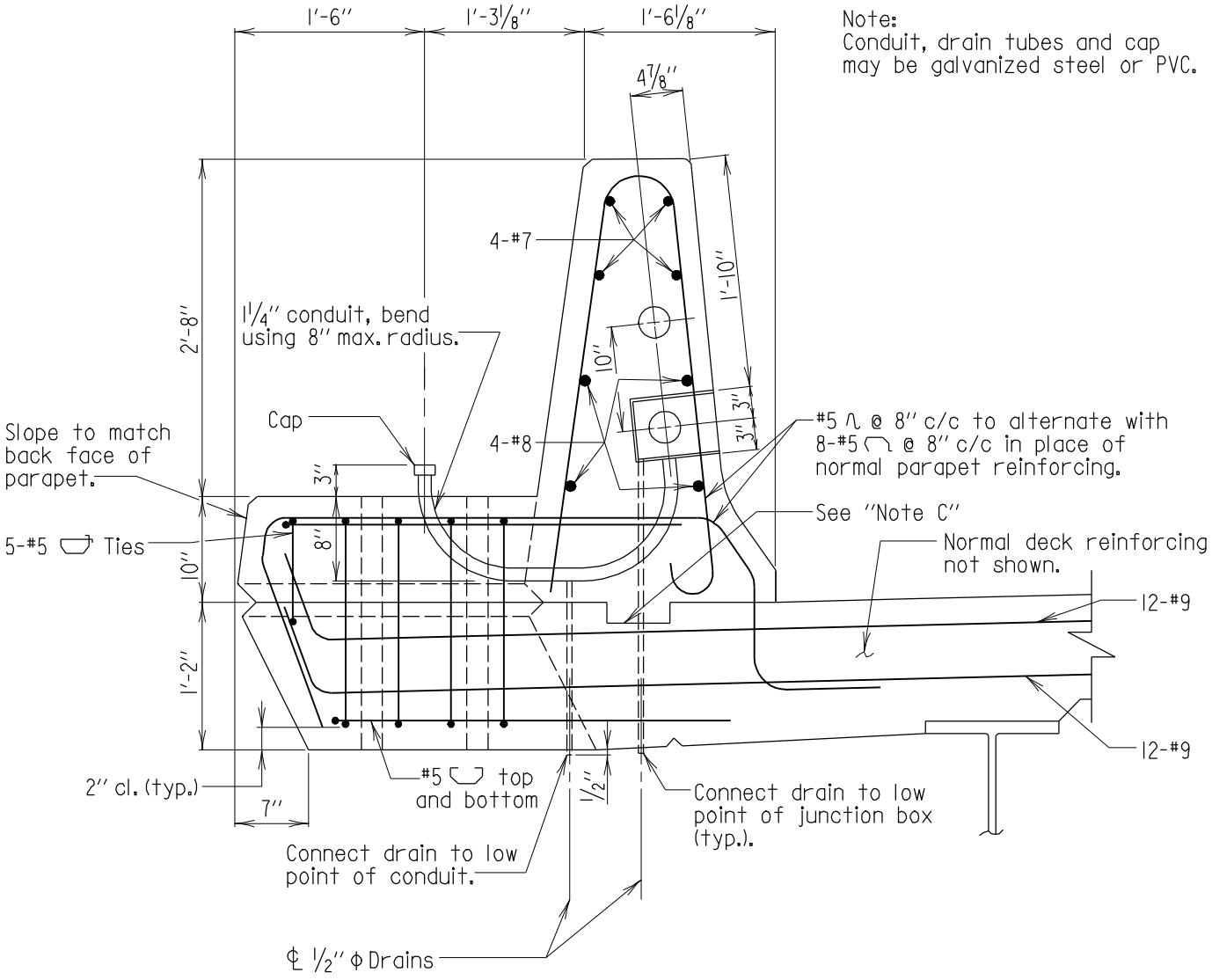
FHWA APPROVAL
DATE: .

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH DUAL CONDUITS AND 42" F-SHAPE PARAPET WITH DIAMOND BACK

STANDARD NO. BR-SS(6.40)-05-250B SHEET 2 OF 2

SUPER-CONCRETE WORK



SECTION B-B

Scale: 3/4"=1'-0"

Note:
All #7 and #8 bars shall be placed continuously in the parapet from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multispan bridge. Refer to BR-SS(6.25)-03-159B.

Note C:
The constr. jt. between the F-shape parapet and the deck may vary slightly from the joint indicated. For exact details and location of the joint see "Superstructure" Sheet.

42'' DIAMOND BACK

APPROVAL
C S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
10-9-07	·
·	·
·	·
·	·

FHWA APPROVAL
DATE: .

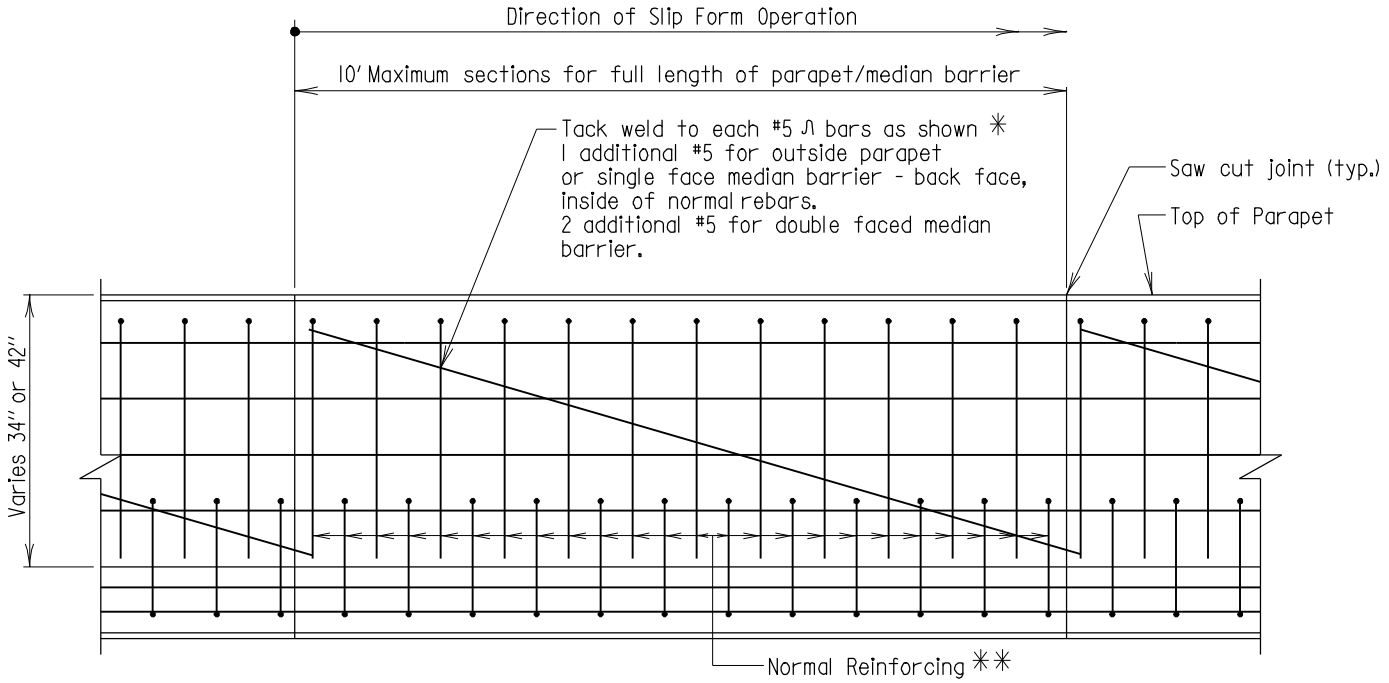
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

VERIFIED 10-9-2007 LRFD

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH DUAL CONDUITS AND 42" F-SHAPE PARAPET WITH DIAMOND BACK

STANDARD NO. BR-SS(6.40)-05-250B(L) SHEET 2 OF 2

SUPER-CONCRETE WORK

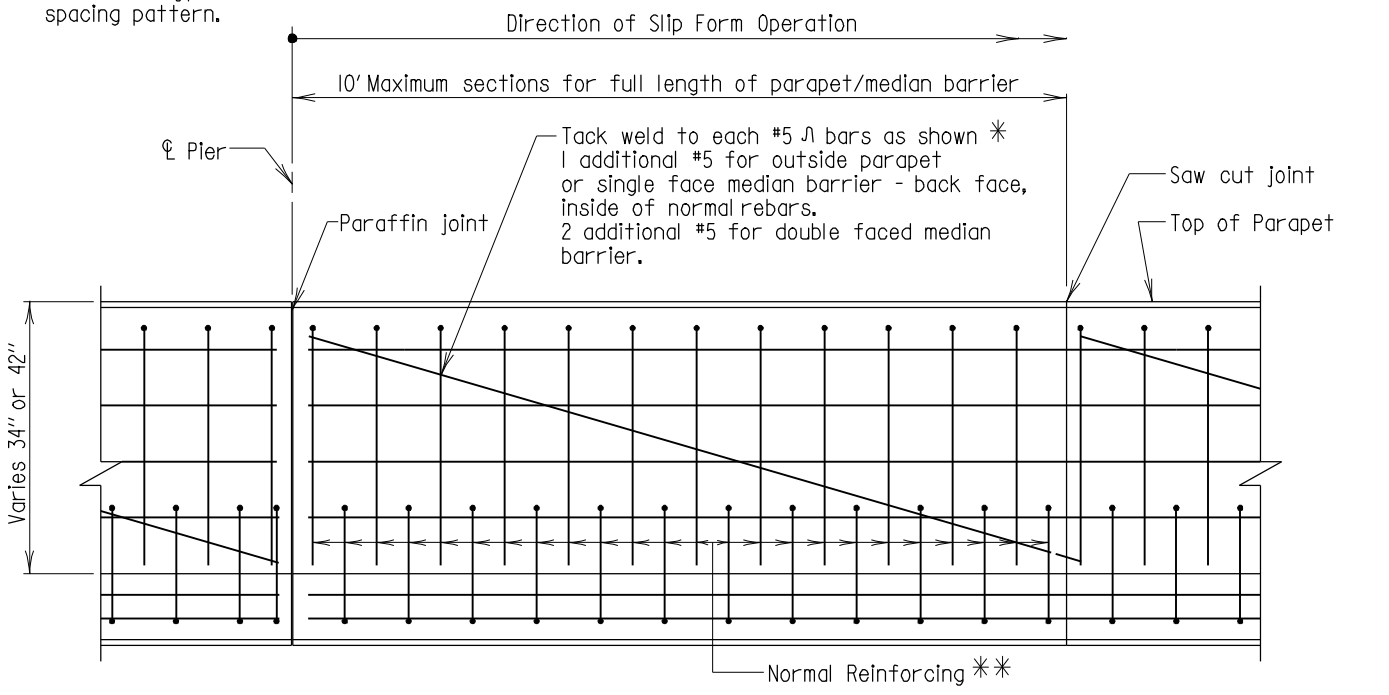


✳ Coat weld with epoxy touch up.

✳✳ See appropiate standard for rebar types and spacing pattern.

ELEVATION

Scale: 1/2" = 1'-0"



ELEVATION-MULTISPAN AT PIER

Scale: 1/2" = 1'-0"

34'' OR 42'' PARAPET OR MEDIAN

Note:

1. All longitudinal bars shall be placed continuously in the parapet/median barrier from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multi span bridge.

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 2/17/94

REVISIONS	
SHA	FHWA
10-22-03	·
·	·
·	·
·	·

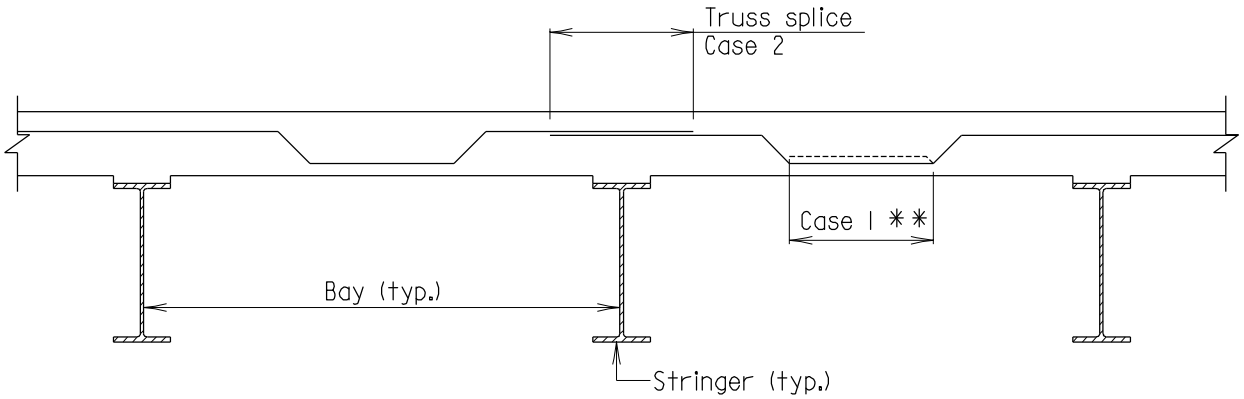
FHWA APPROVAL
DATE: ·

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

ADDITIONAL REINFORCING FOR SLIP FORMING PARAPETS AND MEDIAN BARRIERS

STANDARD NO. BR-SS(6.41)-94-297 SHEET 1 OF 1

SUPER - CONCRETE WORK



** This splice location can only be used if truss bottom leg dimension is greater than or equal to lap length.

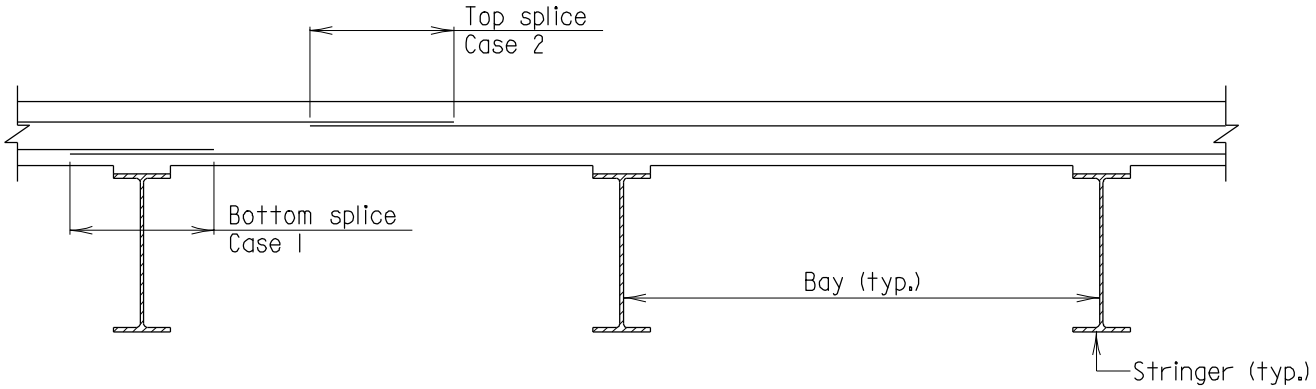
No more than one splice may occur within every 3rd stringer or 3rd bay.

All bars must splice in the same plane (all in top of slab or all in bottom of slab).

SECTION

OPTIONAL TRANSVERSE TRUSS BAR SPLICE

Scale: None



Optional splices shown may not be used for decks 45'-0" or less in width.

SECTION

OPTIONAL TRANSVERSE STRAIGHT BAR SPLICE

Scale: None

Notes:

1. See sheet 2 of 2 for longitudinal steel splice details.
2. Refer to pertinent bar lap charts for definition of cases and lap lengths.

APPROVAL
E.S. Friedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 11/14/95

REVISIONS	
SHA	FHWA
4-21-09	·
·	·
·	·
·	·

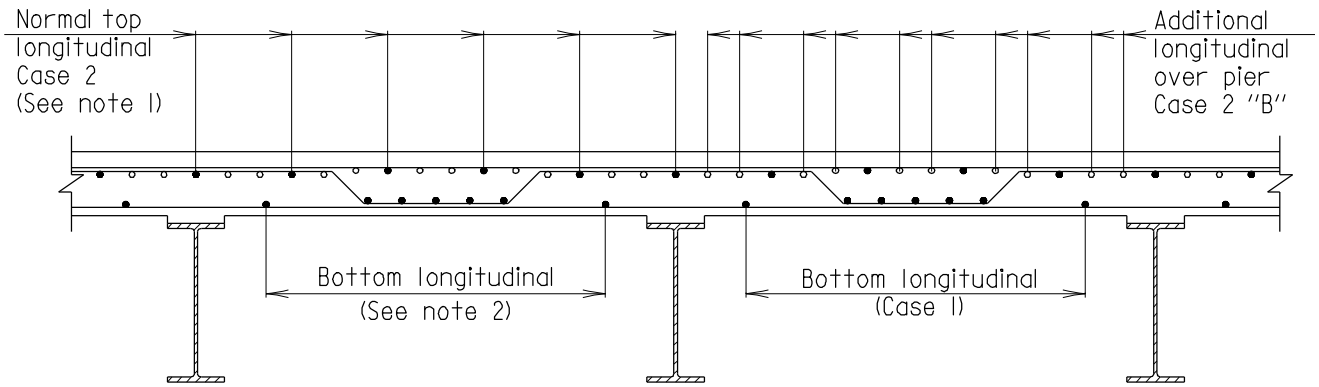
FHWA APPROVAL	
DATE: .	

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

BRIDGE DECK SLAB
SPLICE LOCATIONS

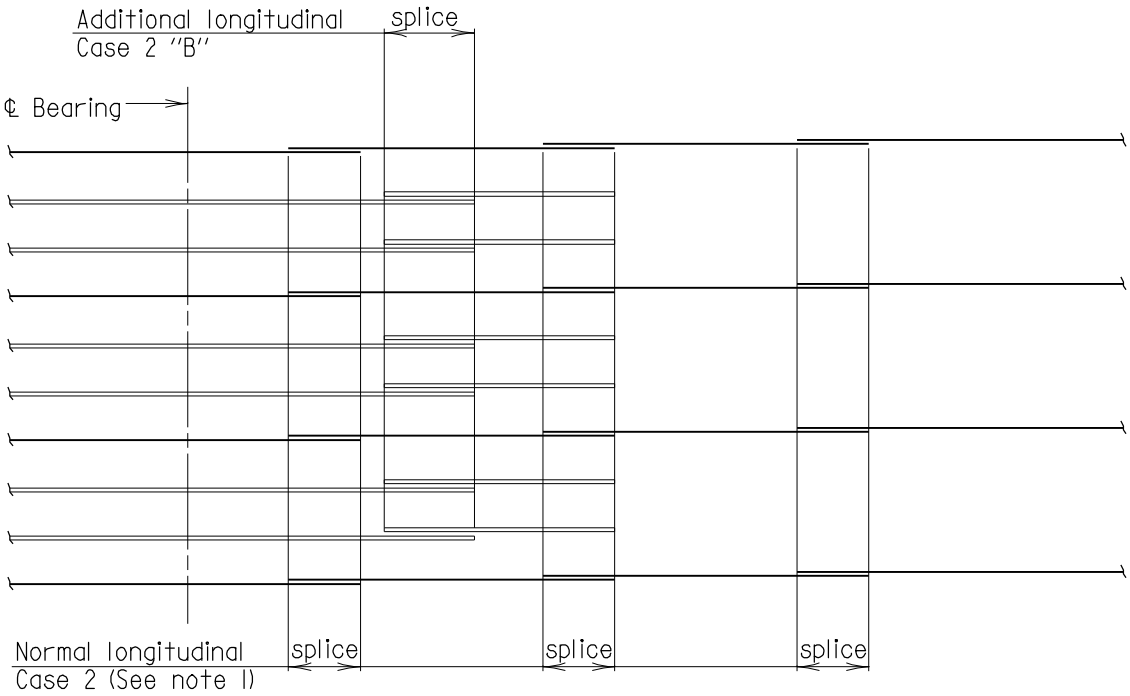
STANDARD NO. BR-SS(6.42)-95-311 SHEET 1 OF 2

SUPER CONCRETE WORK



SECTION

Scale: None



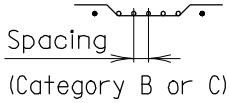
PLAN

TOP LONGITUDINAL SPLICES

Scale: None

Notes:

1. Top normal longitudinal splice length shall not be increased in area of additional longitudinal bars over pier.
2. Category of bottom longitudinal splice based on spacing of bars in bottom of truss.



(Category B or C)

APPROVAL
C. S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 11/14/95

REVISIONS	
SHA	FHWA
.	.
.	.
.	.
.	.

FHWA APPROVAL
DATE: .

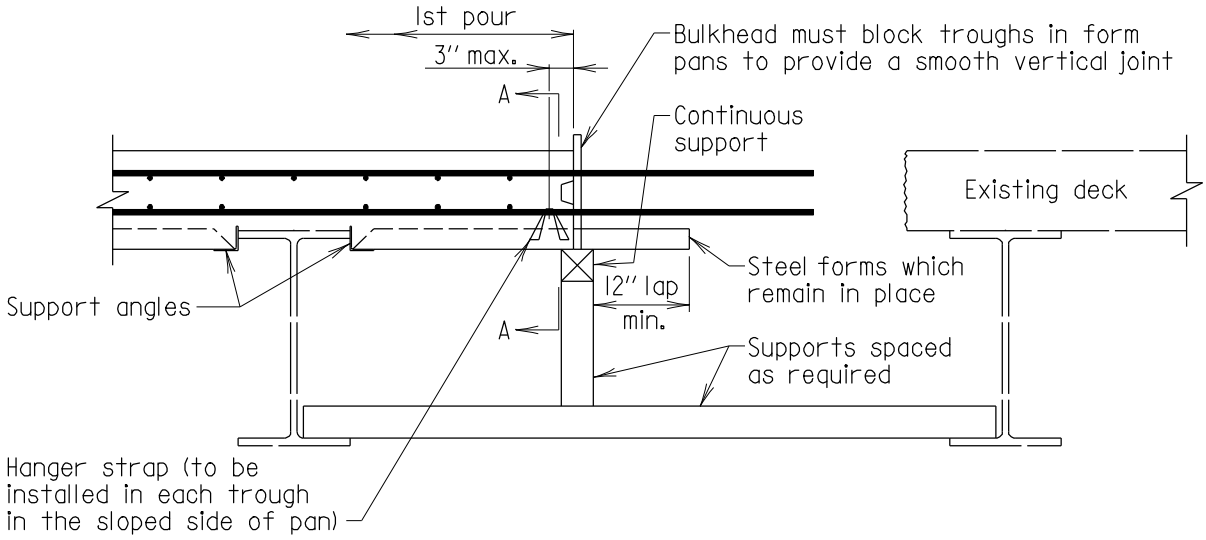
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

BRIDGE DECK SLAB
SPLICE LOCATIONS

STANDARD NO. BR-SS(6.42)-95-311

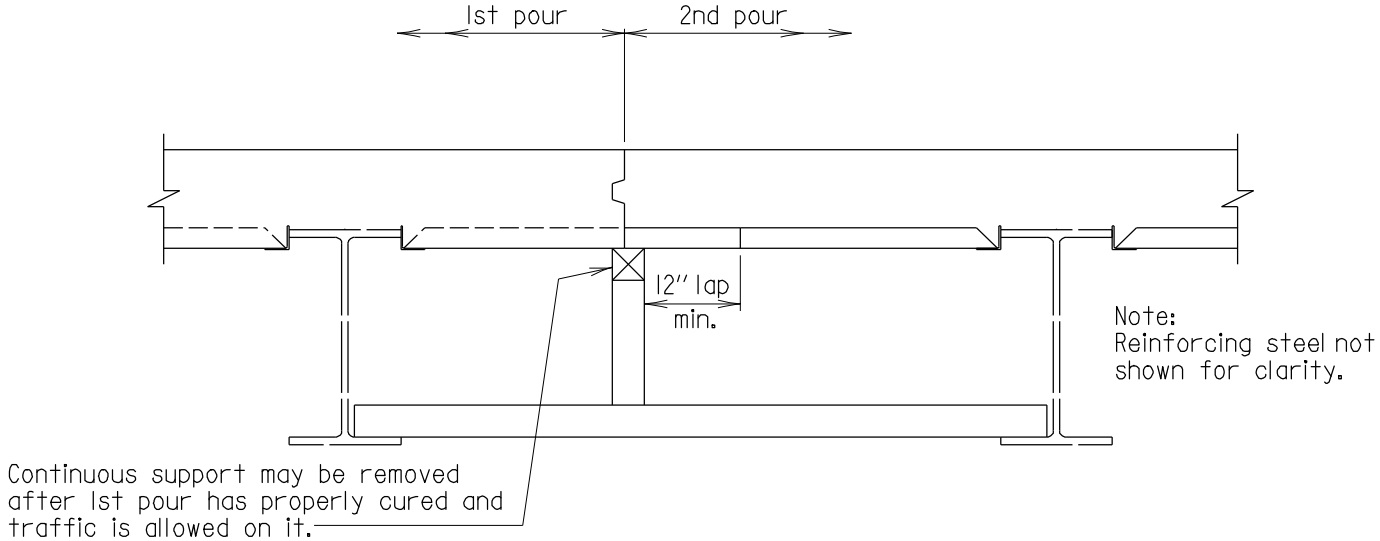
SHEET 2 OF 2

SUPER CONCRETE WORK



SECTION VIEW FOR 1st POUR

Scale: 1/2" = 1'-0"



SECTION VIEW FOR 2nd POUR

Scale: 1/2" = 1'-0"

Notes:

1. This detail can be used in lieu of wood forms in spans where a longitudinal deck construction joint is located.
2. Hanger straps shall not deflect reinforcing from its proper position.

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 11/17/97

REVISIONS	
SHA	FHWA
7-20-06	·
·	·
·	·
·	·

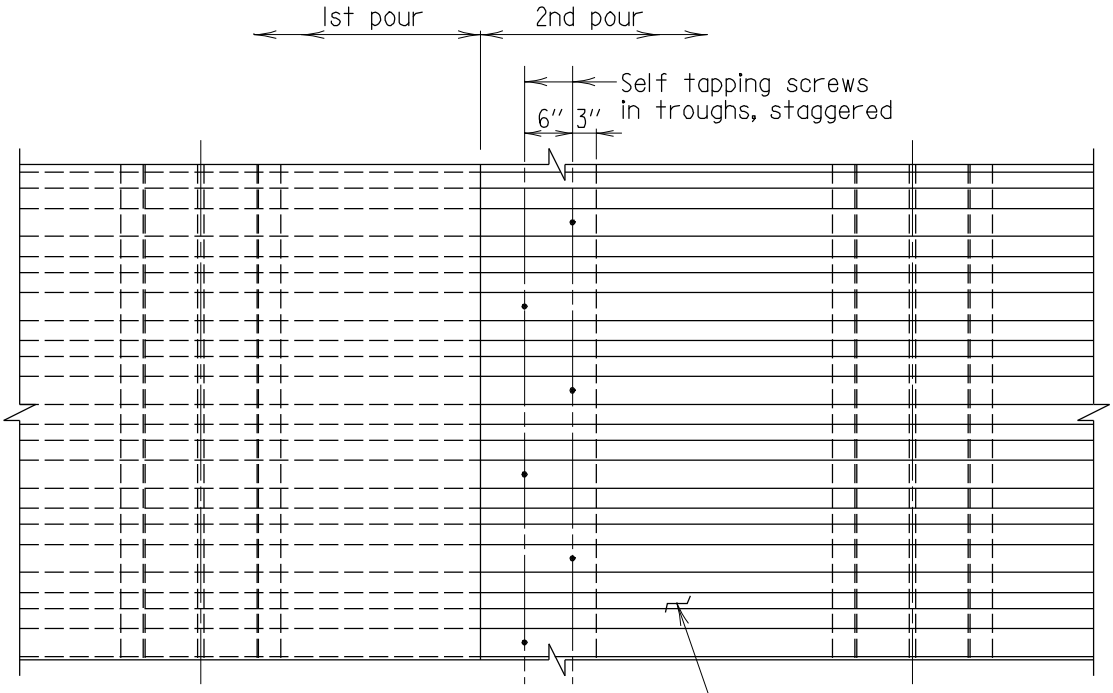
FHWA APPROVAL
DATE: .

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

SPLIT PAN CONSTRUCTION FOR STEEL FORMS WHICH REMAIN IN PLACE

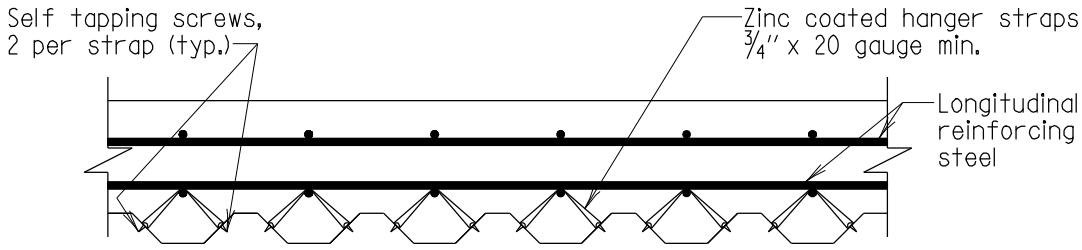
STANDARD NO. BR-SS(6.43)-97-319 SHEET 1 OF 2

SUPER CONCRETE WORK



Note:
Reinforcing steel not
shown for clarity.

PLAN VIEW FOR SPLIT PLAN LAP
Scale: 1/2" = 1'-0"



SECTION A-A AT HANGER STRAPS
Scale: 3/4" = 1'-0"

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 11/17/97

REVISIONS	
SHA	FHWA
7-20-06	·
·	·
·	·
·	·

FHWA APPROVAL
DATE: .

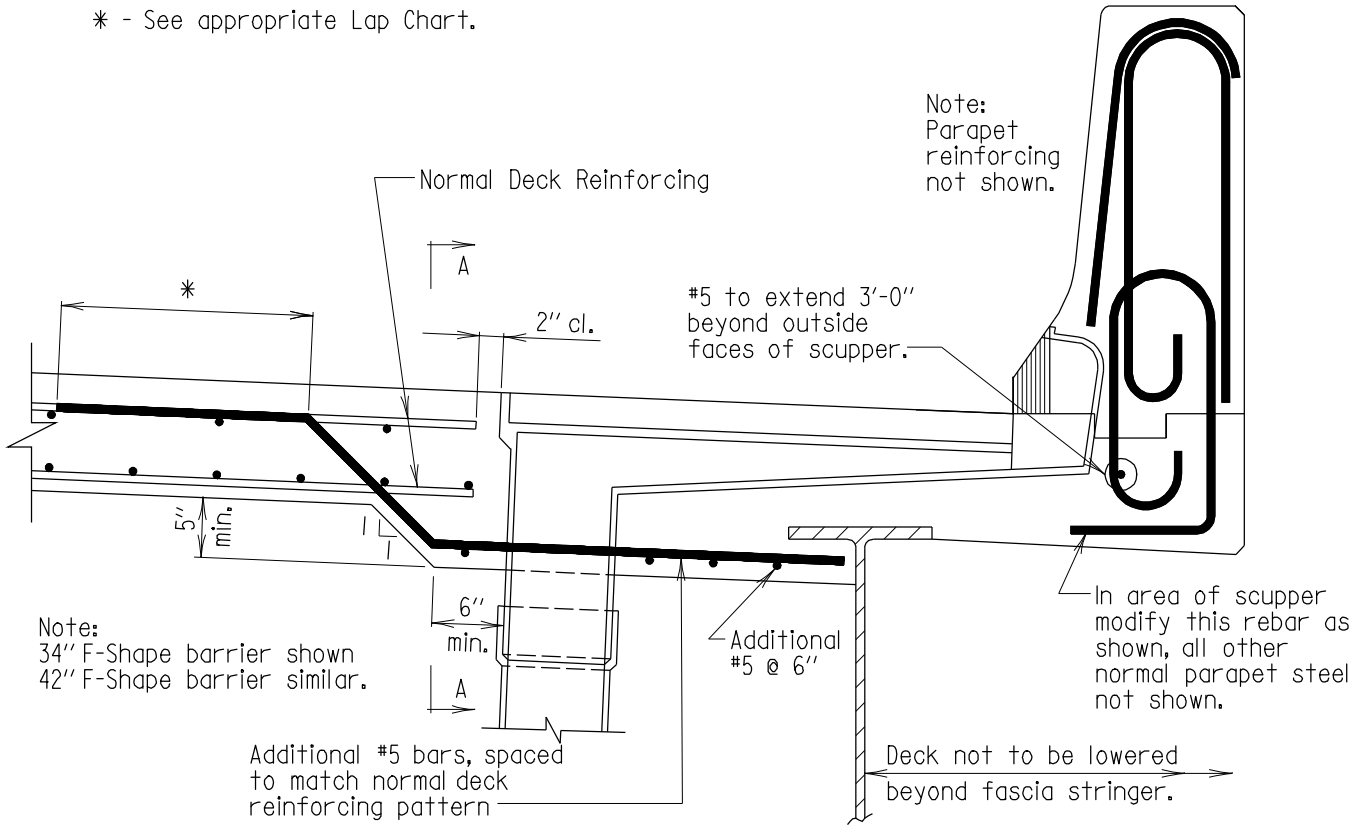
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

SPLIT PAN CONSTRUCTION FOR
STEEL FORMS WHICH REMAIN IN PLACE

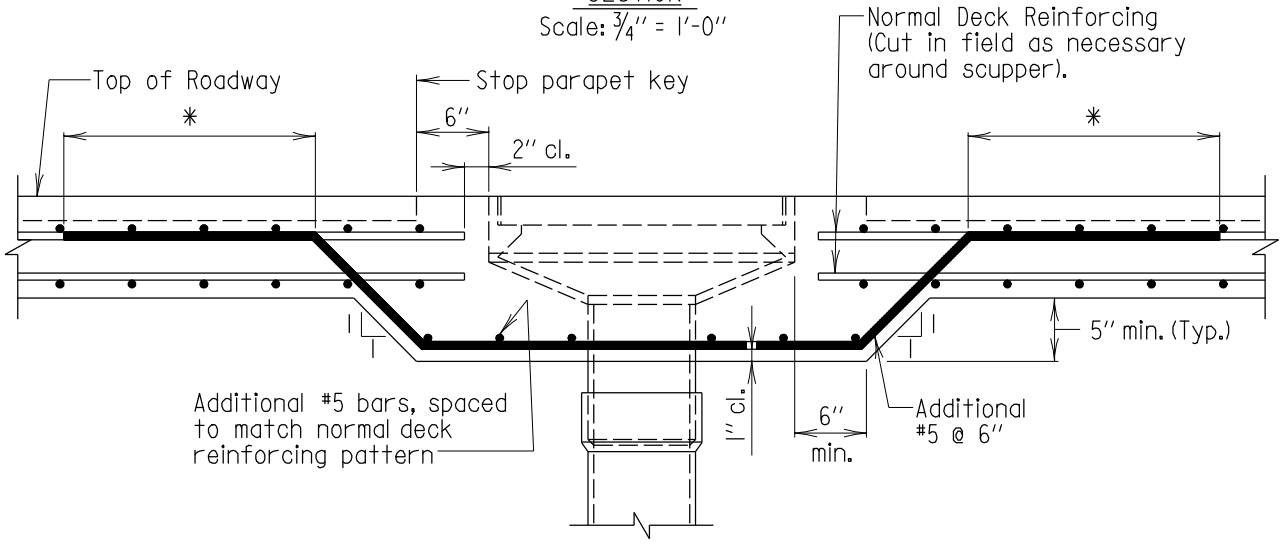
STANDARD NO. BR-SS(6.43)-97-319 SHEET 2 OF 2

SUPER CONCRETE WORK

* - See appropriate Lap Chart.



SECTION
Scale: 3/4" = 1'-0"



SECTION A-A
Scale: 3/4" = 1'-0"

34'' OR 42'' STRAIGHT BACK

Notes:
1. Wood forms may be used in the area of the scupper as approved by the Engineer.
2. Type IA scupper shown.

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 10/22/03

REVISIONS	
SHA	FHWA
.	.
.	.
.	.
.	.

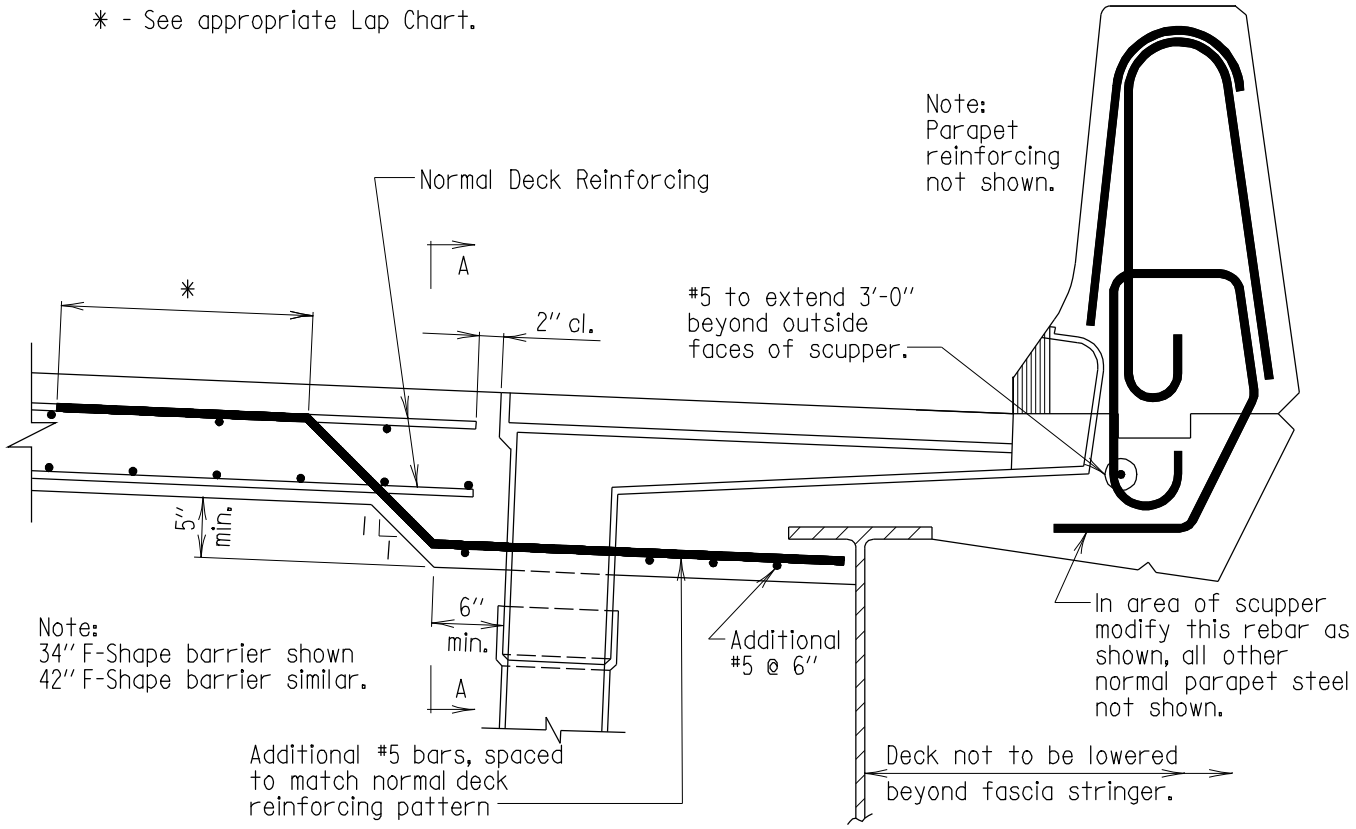
FHWA APPROVAL
DATE: .

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

BRIDGE DECK REINFORCEMENT
PATTERN IN SCUPPER AREA FOR
SCUPPER TYPES I & IA AT F-SHAPE PARAPET
WITH STRAIGHT BACK

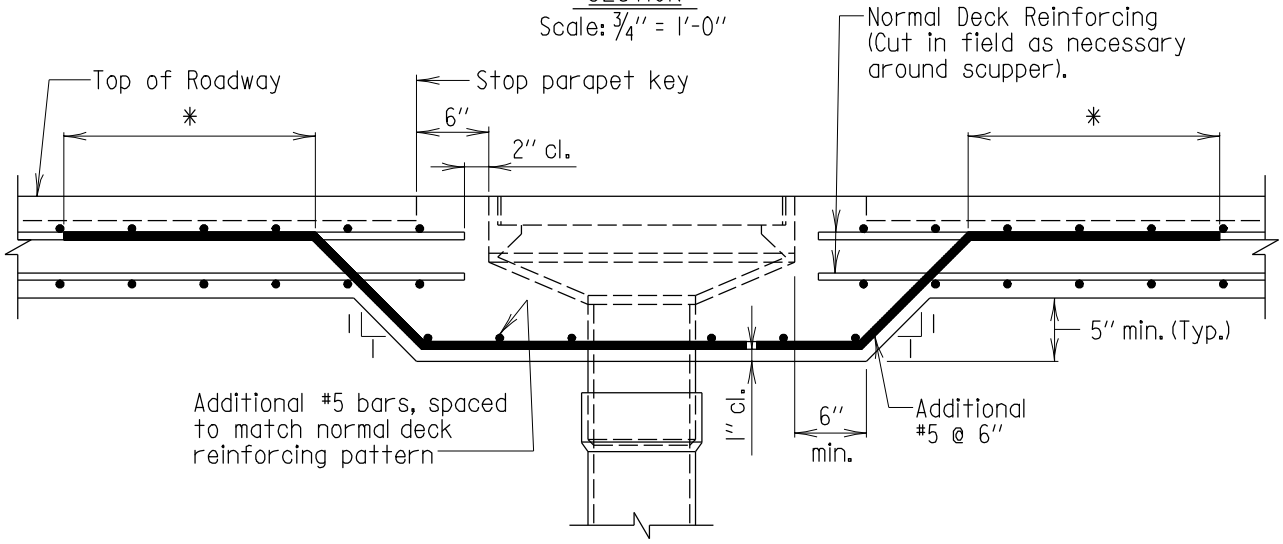
STANDARD NO. BR-SS(6.44)-03-346 SHEET 1 OF 1

SUPER - CONCRETE WORK



SECTION

Scale: 3/4'' = 1'-0''



SECTION A-A

Scale: 3/4'' = 1'-0''

34'' OR 42'' DIAMOND BACK

Notes:
1. Wood forms may be used in the area of the scupper as approved by the Engineer.
2. Type IA scupper shown.

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 10/22/03

REVISIONS	
SHA	FHWA
.	.
.	.
.	.
.	.

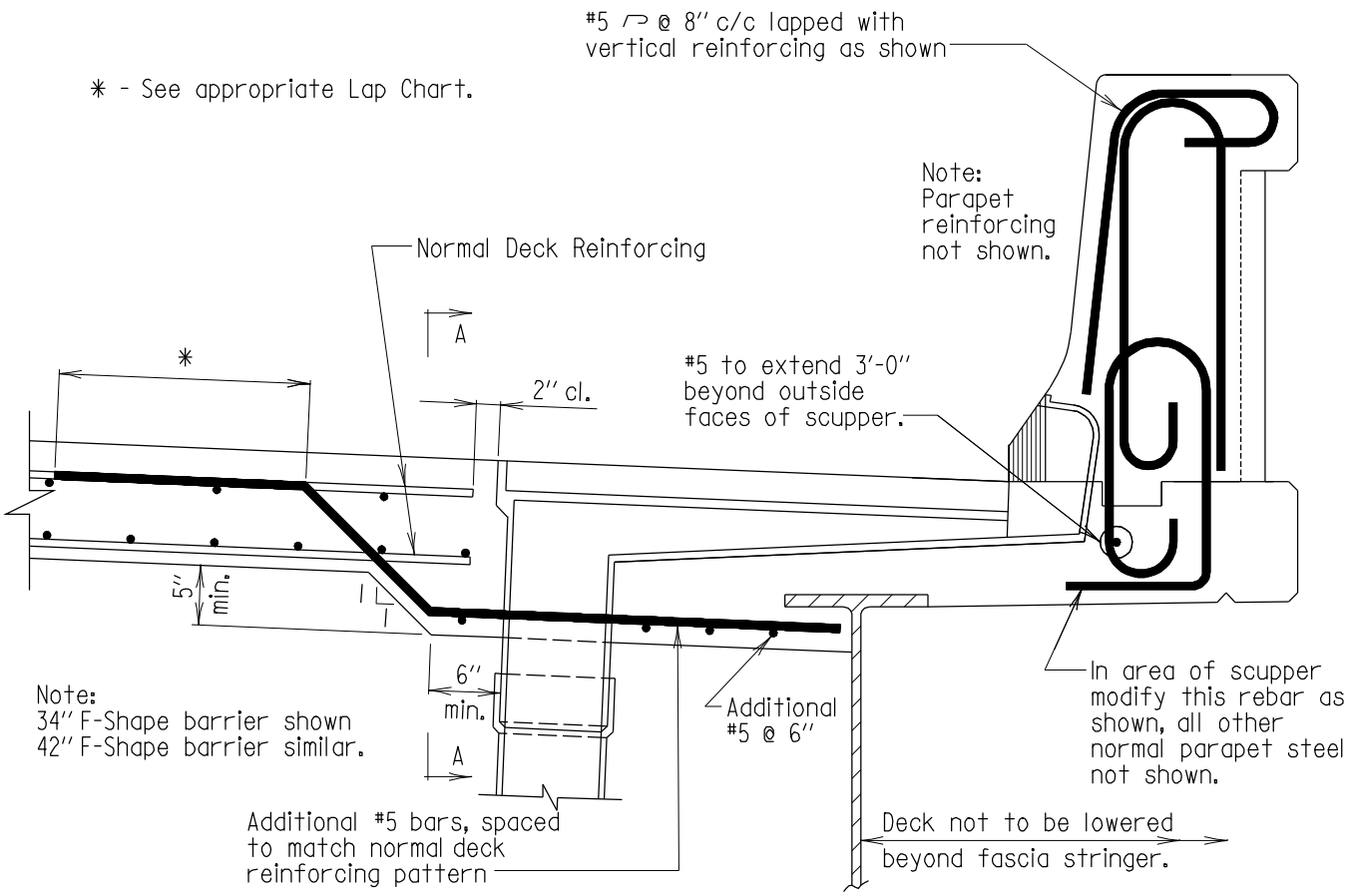
FHWA APPROVAL
DATE: .

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

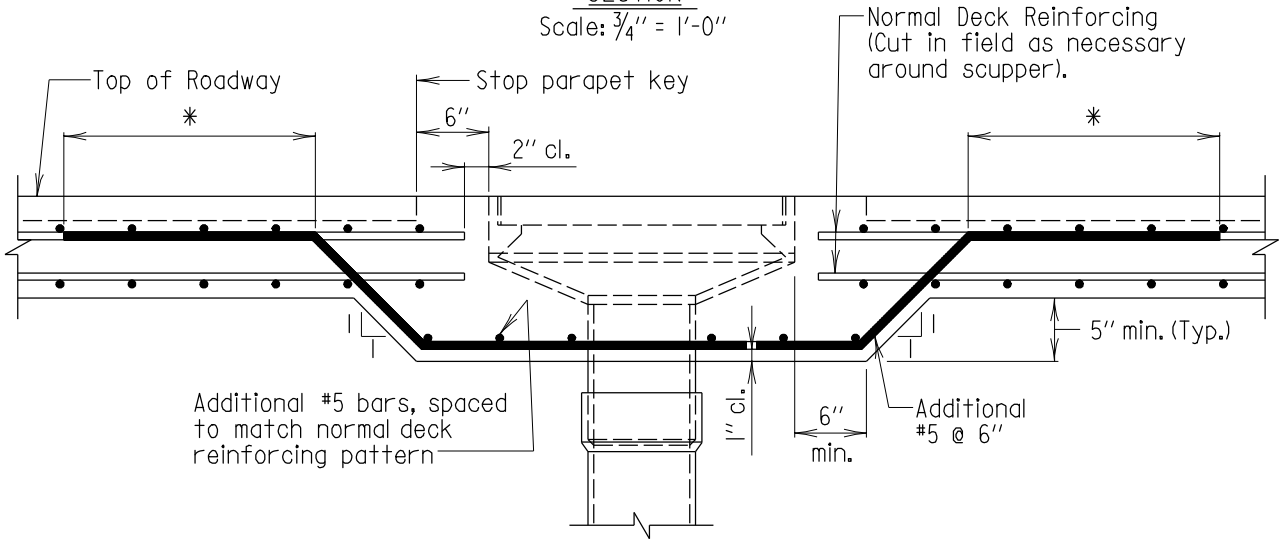
BRIDGE DECK REINFORCEMENT
PATTERN IN SCUPPER AREA FOR
SCUPPER TYPES I & IA AT F-SHAPE PARAPET
WITH DIAMOND BACK

STANDARD NO. BR-SS(6.45)-03-347 SHEET 1 OF 1

SUPER - CONCRETE WORK



SECTION
Scale: 3/4" = 1'-0"



SECTION A-A
Scale: 3/4" = 1'-0"

34'' OR 42'' RECESSED BACK

Notes:
1. Wood forms may be used in the area of the scupper as approved by the Engineer.
2. Type IA scupper shown.

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 10/22/03

REVISIONS	
SHA	FHWA
.	.
.	.
.	.
.	.

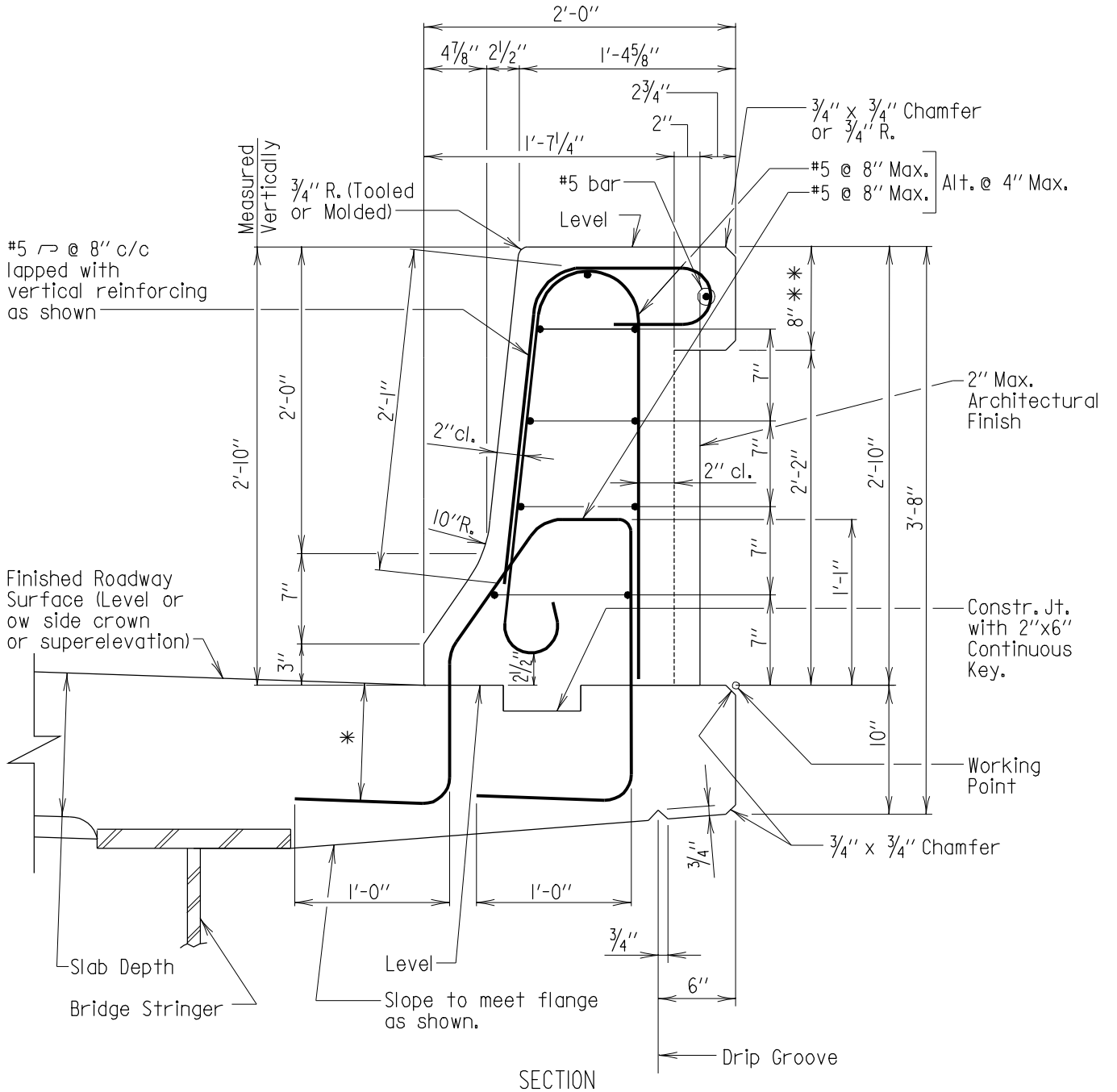
FHWA APPROVAL
DATE: .

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

BRIDGE DECK REINFORCEMENT PATTERN IN SCUPPER AREA FOR SCUPPER TYPES I & IA AT F-SHAPE PARAPET WITH ARCHITECTURAL FINISH

STANDARD NO. BR-SS(6.46)-03-348 SHEET 1 OF 1

SUPER - CONCRETE WORK



SECTION

Scale: 1" = 1'-0"

* Slab Depth - 1"

** This dimension can vary ($\frac{1}{2}$" ± max.) according to the form liner chosen. The Contractor must contact SHA Project Engineer to verify form liner and this dimension.

Notes:

1. All longitudinal bars are #5 spaced as shown and shall be placed continuously in the parapet from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multi span bridge.
2. Key is nominal size.
3. Front face of parapet to be dimensioned to a plumb line.
4. All reinforcing steel to be epoxy coated.
5. Concrete deck reinforcing steel not shown.

34" RECESSED BACK TL-4 BRIDGE RAILING

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 10/22/03

REVISIONS	
SHA	FHWA
11-26-07	·
·	·
·	·
·	·

FHWA APPROVAL
DATE: 7-15-03

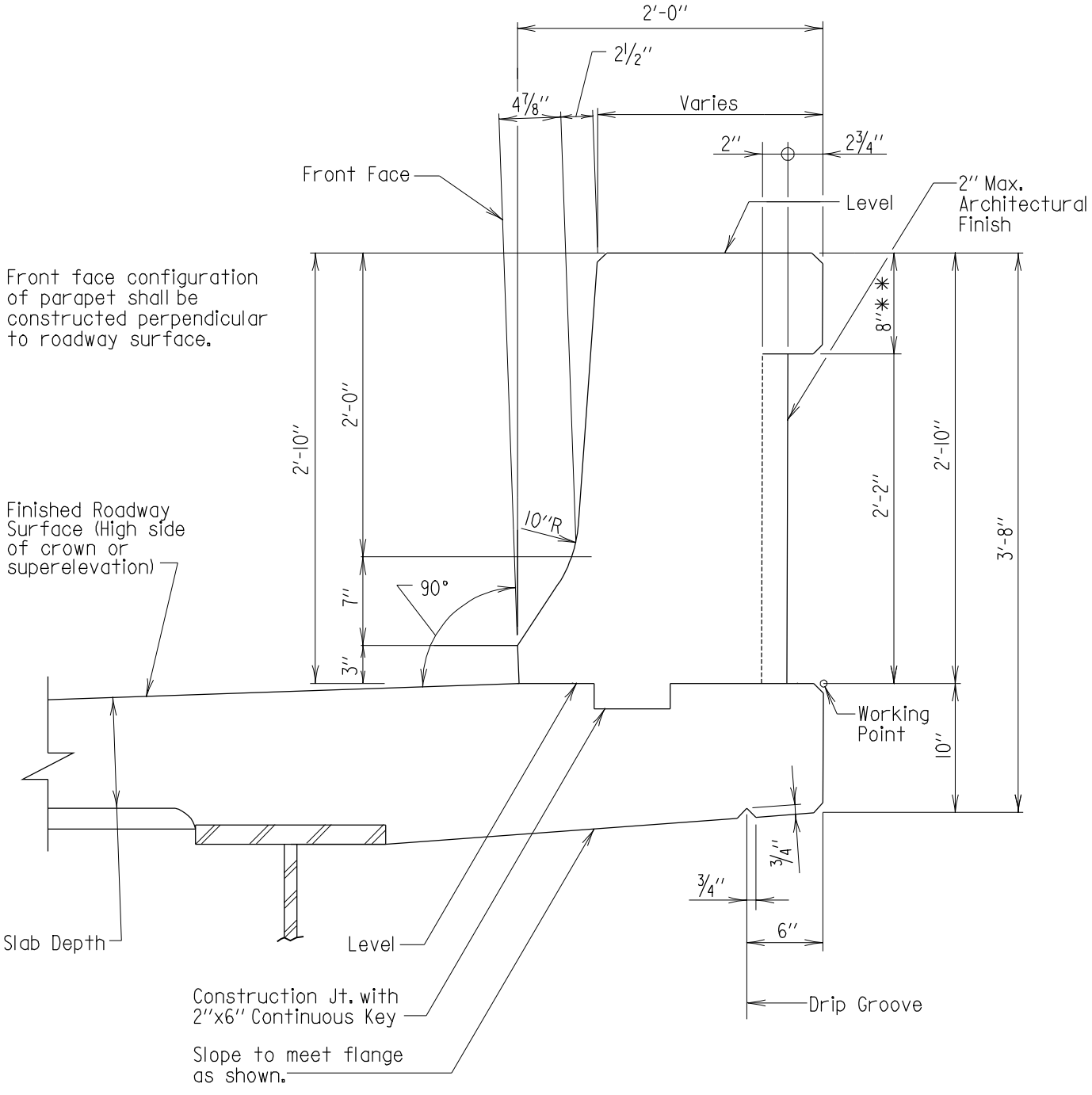
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

LEVEL OR LOW SIDE OF CROWN (OR SUPERELEVATED) SECTION OF 34" F-SHAPE PARAPET WITH ARCHITECTURAL FINISH

STANDARD NO. BR-SS(6.47)-03-349A

SHEET 1 OF 2

SUPER CONCRETE WORK



SECTION A

Scale: 1" = 1'-0"

** This dimension can vary (1/2" ± max.) according to the form liner chosen. The Contractor must contact SHA Project Engineer to verify form liner and this dimension.

34" RECESSED BACK TL-4 BRIDGE RAILING

Note:
For all details not shown see sheet 1 of 2.

APPROVAL
E.S. Friedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 10/22/03

REVISIONS	
SHA	FHWA
11-26-07	·
·	·
·	·
·	·

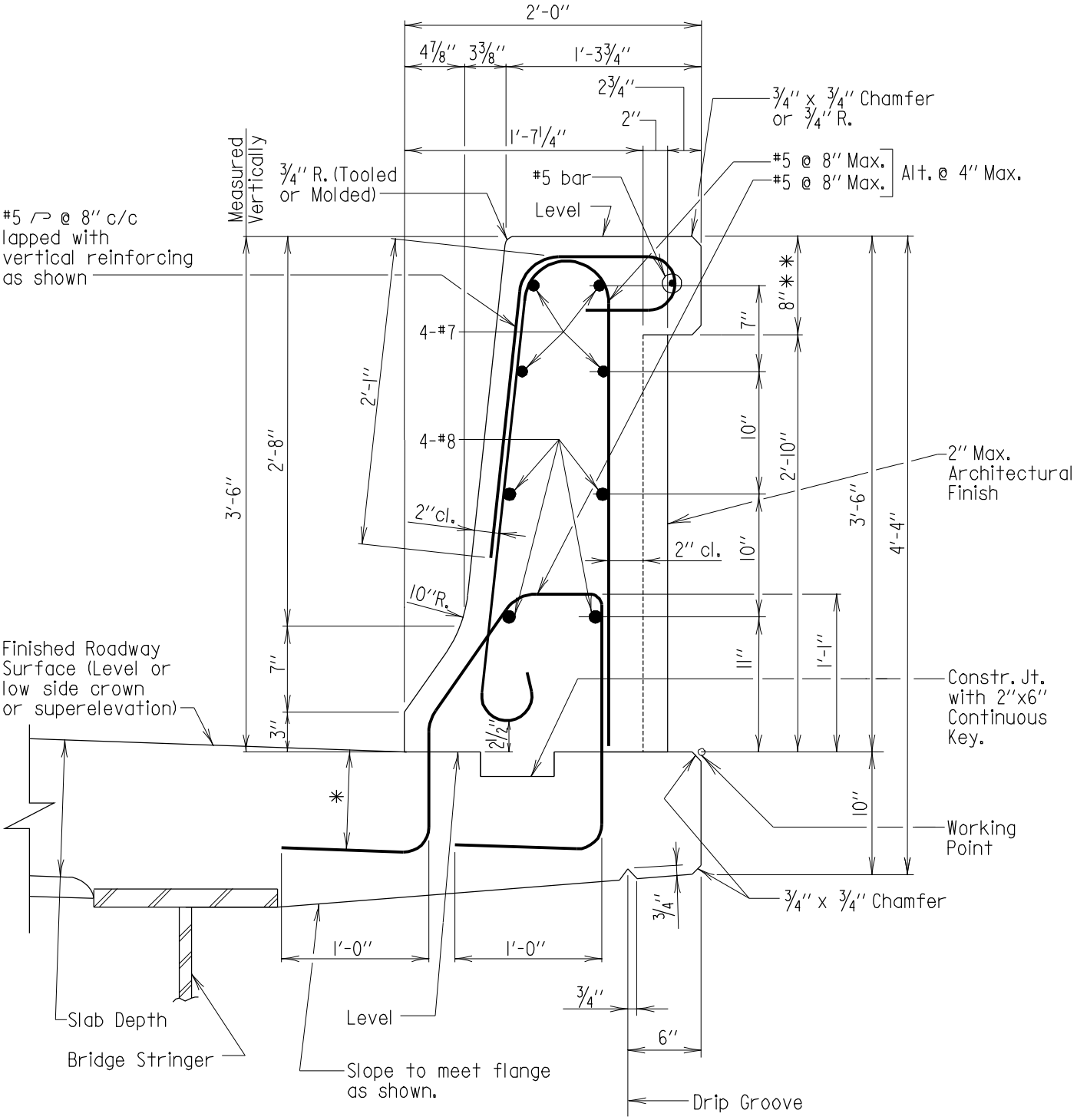
FHWA APPROVAL
DATE: ·

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

HIGH SIDE OF CROWN (OR SUPERELEVATED) SECTION OF 34" F-SHAPE PARAPET WITH ARCHITECTURAL FINISH

STANDARD NO. BR-SS(6.47)-03-349A SHEET 2 OF 2

SUPER CONCRETE WORK



SECTION

Scale: 1" = 1'-0"

* Slab Depth - 1"

** This dimension can vary (1/2" ± max.) according to the form liner chosen. The Contractor must contact SHA Project Engineer to verify form liner and this dimension.

Notes:

1. All #5, #7 and #8 longitudinal bars shall be placed continuously in the parapet from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multi span bridge.
2. Key is nominal size.
3. Front face of parapet to be dimensioned to a plumb line.
4. All reinforcing steel to be epoxy coated.
5. Concrete deck reinforcing steel not shown.

42" RECESSED BACK TL-5 BRIDGE RAILING

APPROVAL
E.S. Friedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 10/22/03

REVISIONS	
SHA	FHWA
11-26-07	·
·	·
·	·
·	·

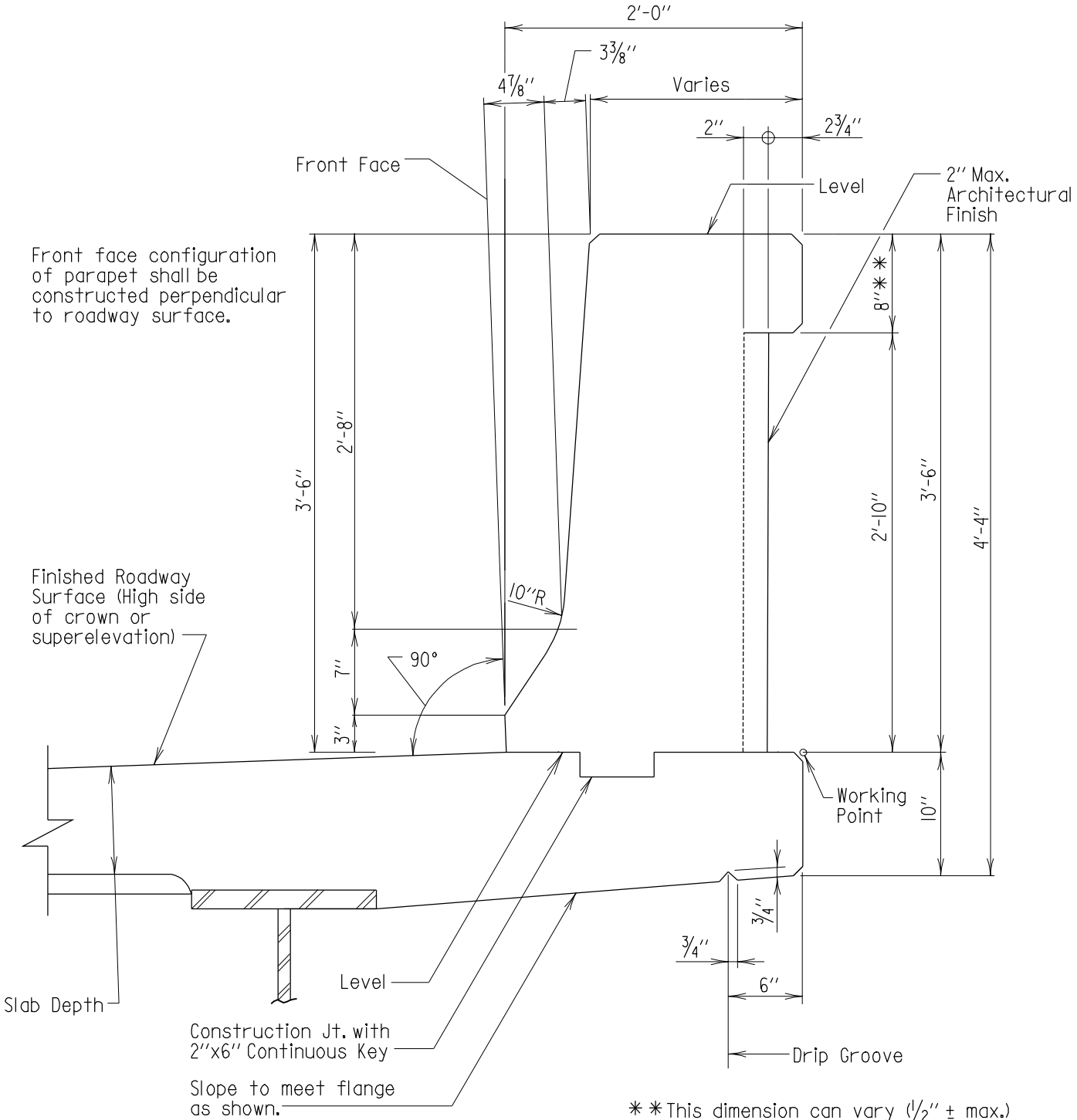
FHWA APPROVAL
DATE: 7-15-03

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

LEVEL OR LOW SIDE OF CROWN (OR SUPERELEVATED) SECTION OF 42" F-SHAPE PARAPET WITH ARCHITECTURAL FINISH

STANDARD NO. BR-SS(6.47)-03-349B SHEET 1 OF 2

SUPER CONCRETE WORK



SECTION A

Scale: 1" = 1'-0"

** This dimension can vary (1/2" ± max.) according to the form liner chosen. The Contractor must contact SHA Project Engineer to verify form liner and this dimension.

42" RECESSED BACK TL-5 BRIDGE RAILING

Note:
For all details not shown see sheet 1 of 2.

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 10/22/03

REVISIONS	
SHA	FHWA
11-26-07	·
·	·
·	·
·	·

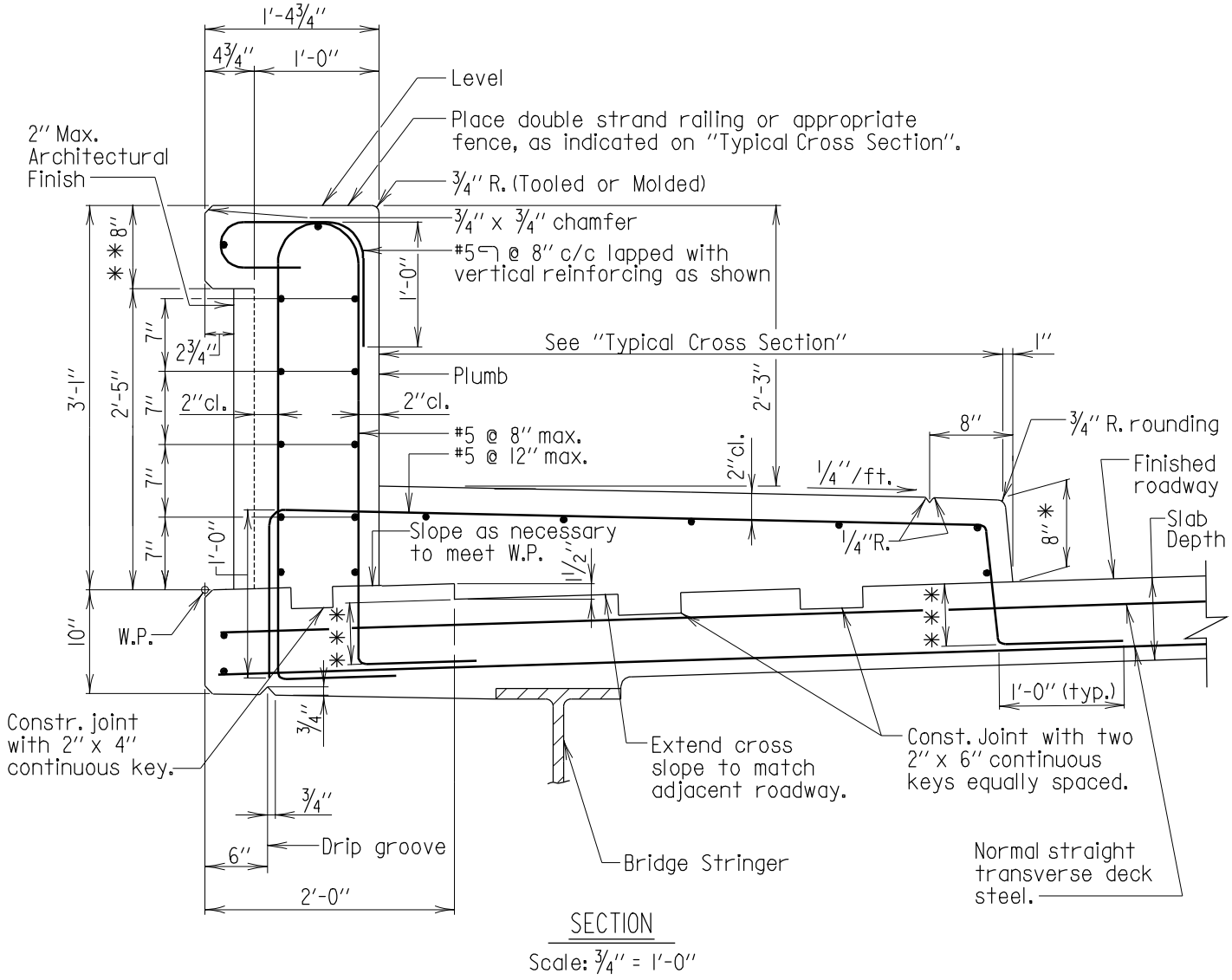
FHWA APPROVAL
DATE: ·

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

HIGH SIDE OF CROWN (OR SUPERELEVATED)
SECTION OF 42" F-SHAPE PARAPET
WITH ARCHITECTURAL FINISH

STANDARD NO. BR-SS(6.47)-03-349B SHEET 2 OF 2

SUPER CONCRETE WORK



SECTION

Scale: 3/4" = 1'-0"

* Unless otherwise indicated on "Typical Cross Section".

** This dimension can vary (1/2" ± max.) according to the form liner chosen. The Contractor must contact SHA Project Engineer to verify form liner and this dimension.

*** Slab Depth - 1"

Notes:

1. All longitudinal bars are #5 spaced as shown and shall be placed continuously in the parapet from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multi span bridge.
2. All keys are nominal size.
3. Portions of normal longitudinal deck steel and truss bars are not shown.
4. W.P. = Working Point.
5. All reinforcing steel to be epoxy coated.

SIDEWALK WITH RECESSED BACK

APPROVAL
E.S. Friedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 10/22/03

REVISIONS	
SHA	FHWA
11-18-05	·
11-26-07	·
·	·
·	·

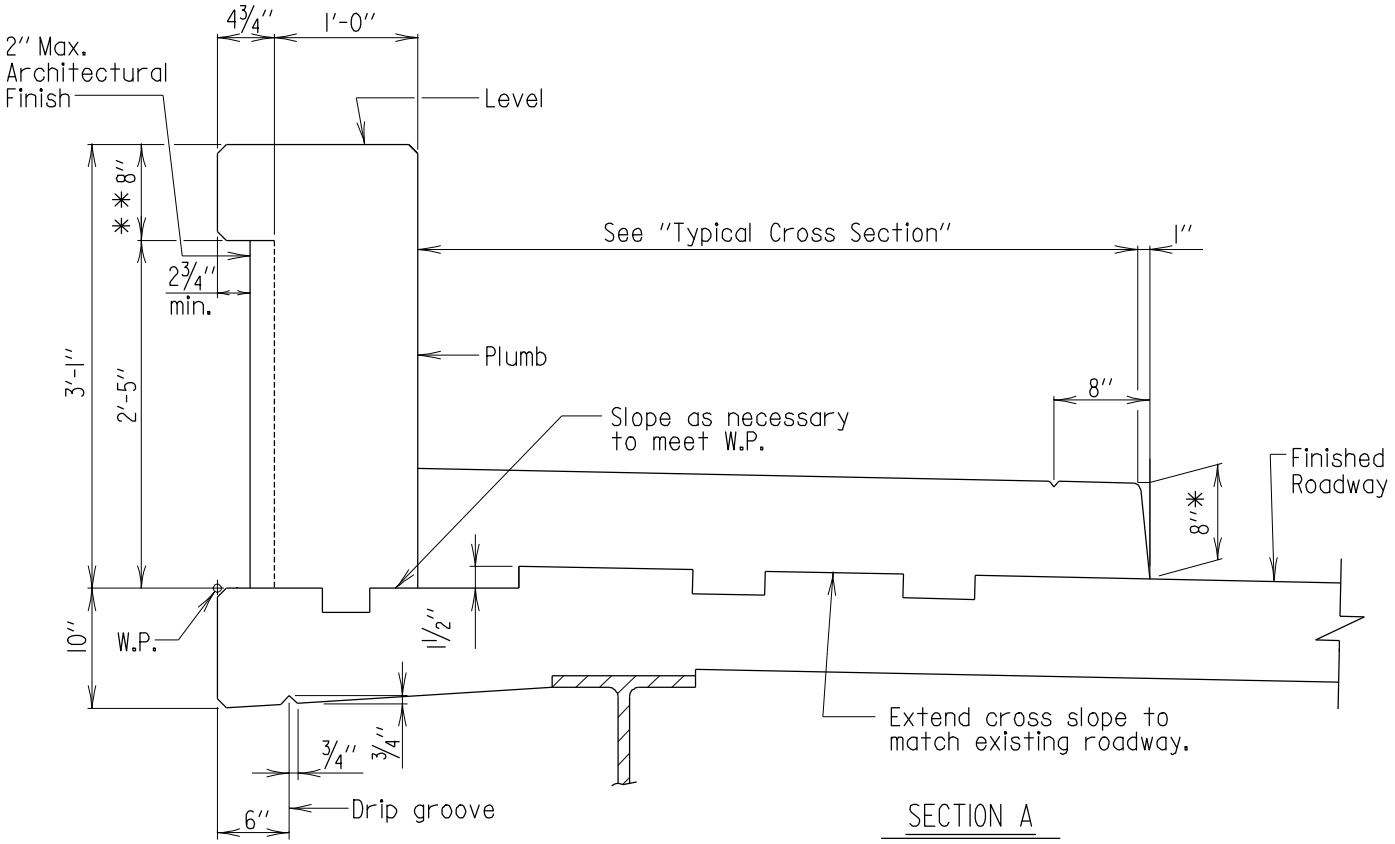
FHWA APPROVAL		
DATE:	·	·

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

LEVEL OR LOW SIDE OF CROWN (OR SUPERELEVATED) SECTION OF SIDEWALK AND PARAPET WITH ARCHITECTURAL FINISH

STANDARD NO. BR-SS(6.48)-03-350 SHEET 1 OF 2

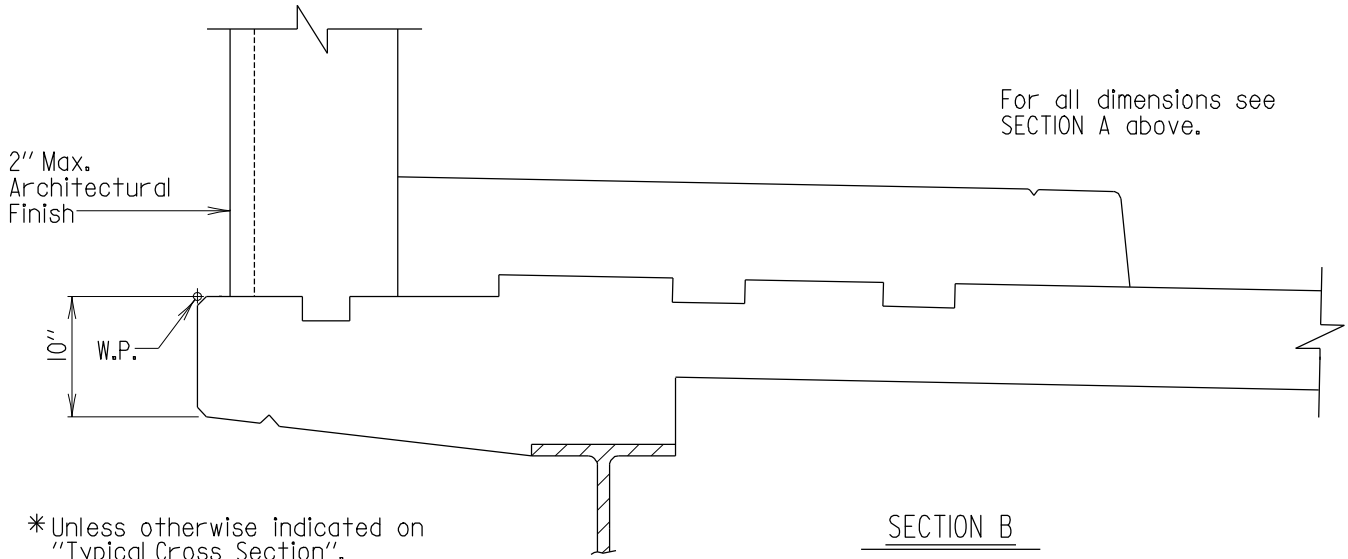
SUPER CONCRETE WORK



SECTION A

(WHEN BOTTOM OF OVERHANG IS LOWER THAN BOTTOM OF TOP FLANGE)

Scale: 3/4" =1'-0"



SECTION B

(WHEN BOTTOM OF OVERHANG IS HIGHER THAN BOTTOM OF TOP FLANGE)

Scale: 3/4" =1'-0"

* Unless otherwise indicated on "Typical Cross Section".

** This dimension can vary (1/2" ± max.) according to the form liner chosen. The Contractor must contact SHA Project Engineer to verify form liner and this dimension.

Note:
For all details not shown see sheet 1 of 2.

SIDEWALK WITH RECESSED BACK

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 10/22/03

REVISIONS	
SHA	FHWA
.	.
.	.
.	.
.	.

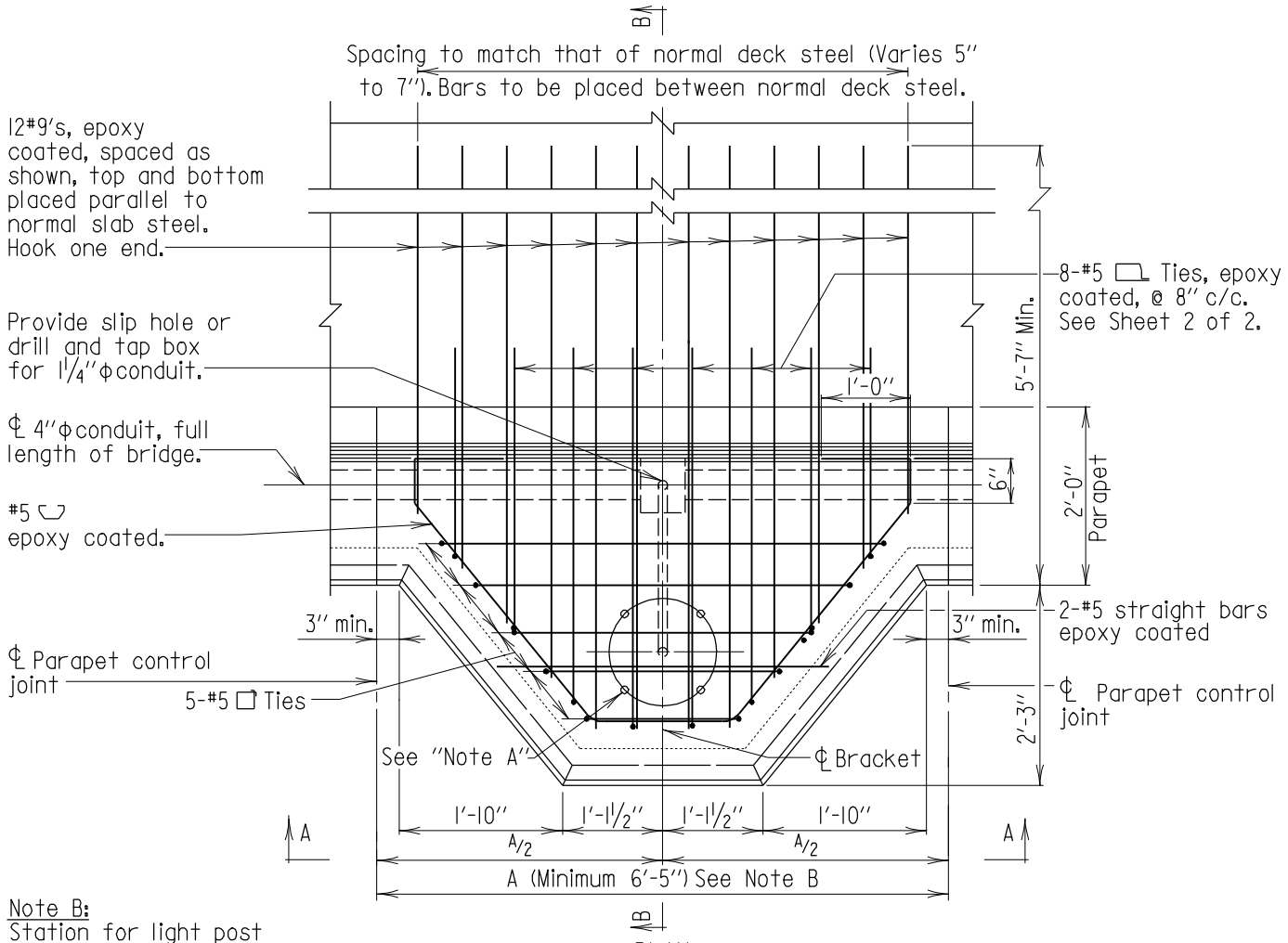
FHWA APPROVAL
DATE: .

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

HIGH SIDE OF CROWN (OR SUPERELEVATED) SECTION OF SIDEWALK AND PARAPET WITH ARCHITECTURAL FINISH

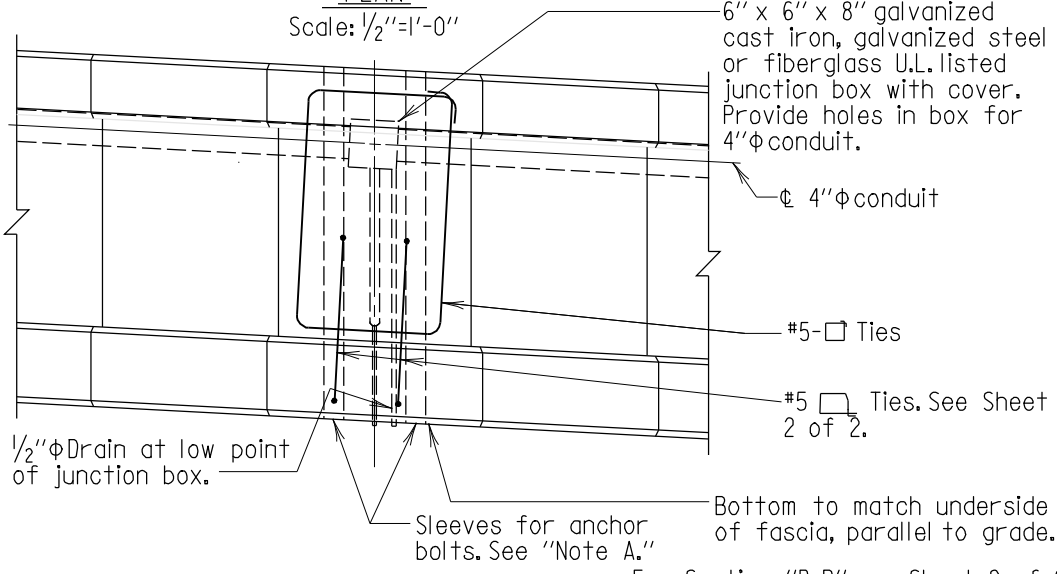
STANDARD NO. BR-SS(6.48)-03-350 SHEET 2 OF 2

SUPER CONCRETE WORK



PLAN

Scale: 1/2"=1'-0"



For Section "B-B" see Sheet 2 of 2.

Note B:
Station for light post support bracket shown on Plans is only approximate. ℄ Bracket to be located midway between parapet control joints.
A = Normal parapet control joint spacing (adjust as necessary to meet minimum limitations).
If a light post is placed at ℄ of pier, eliminate the control joint at the ℄ of pier, The first control joint beyond, on one side only shall be changed to a paraffin joint.

Note:
Normal slab reinforcing steel not shown.

Note A:
Contractor is to contact the District Engineer in writing prior to placing sleeves for anchor bolts, to ascertain the bolt circle dimension and size of anchor bolts that will be used on this project. All light poles to be set plumb using leveling nuts on anchor bolts. Max. height of pole for this detail is 40'.

SECTION A-A

Scale: 1/2"=1'-0"

34" RECESSED BACK

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
1-9-08	·
·	·
·	·
·	·

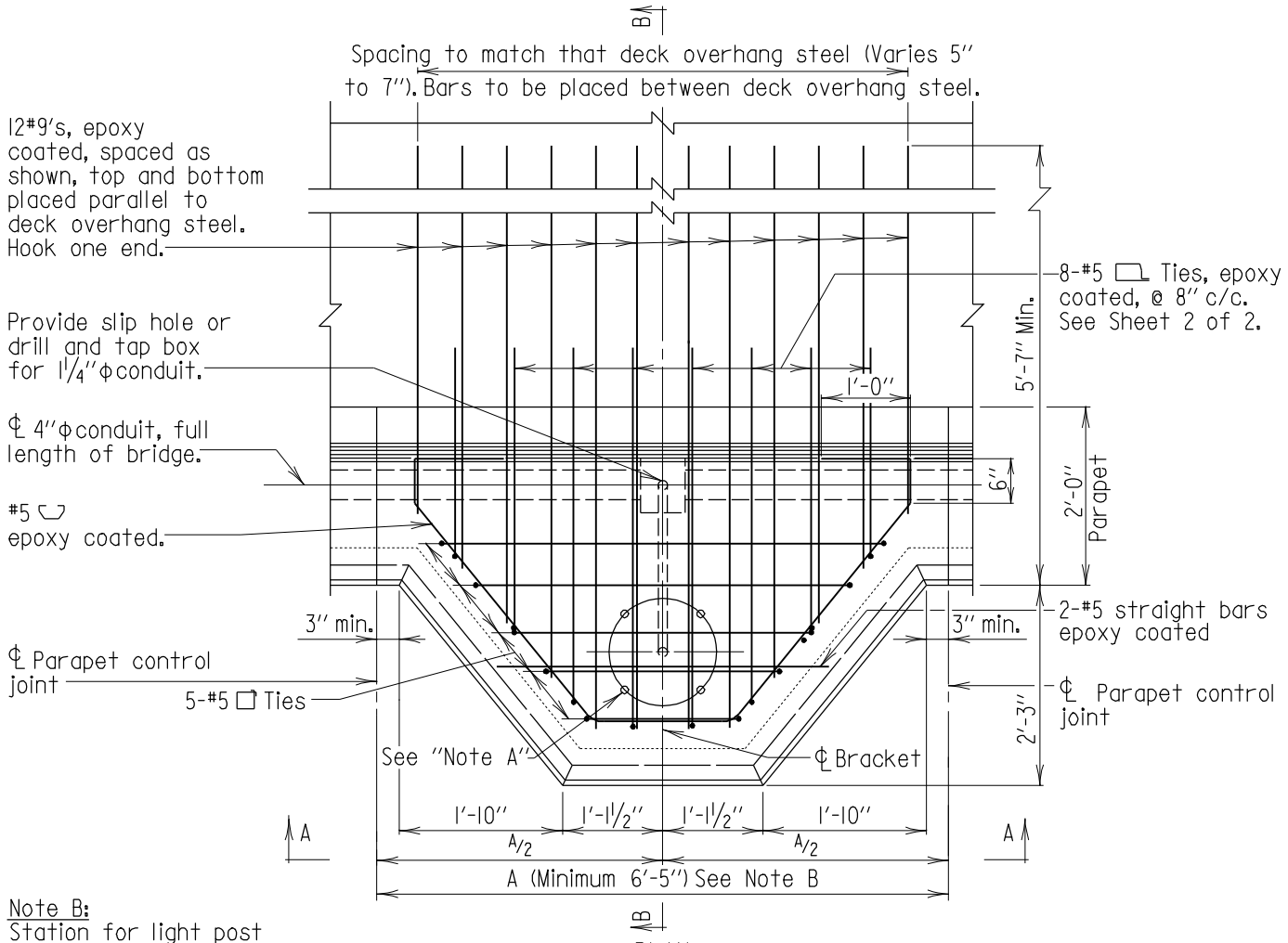
FHWA APPROVAL
DATE: .

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH SINGLE CONDUIT AND 34" F-SHAPE PARAPET WITH ARCHITECTURAL FINISH

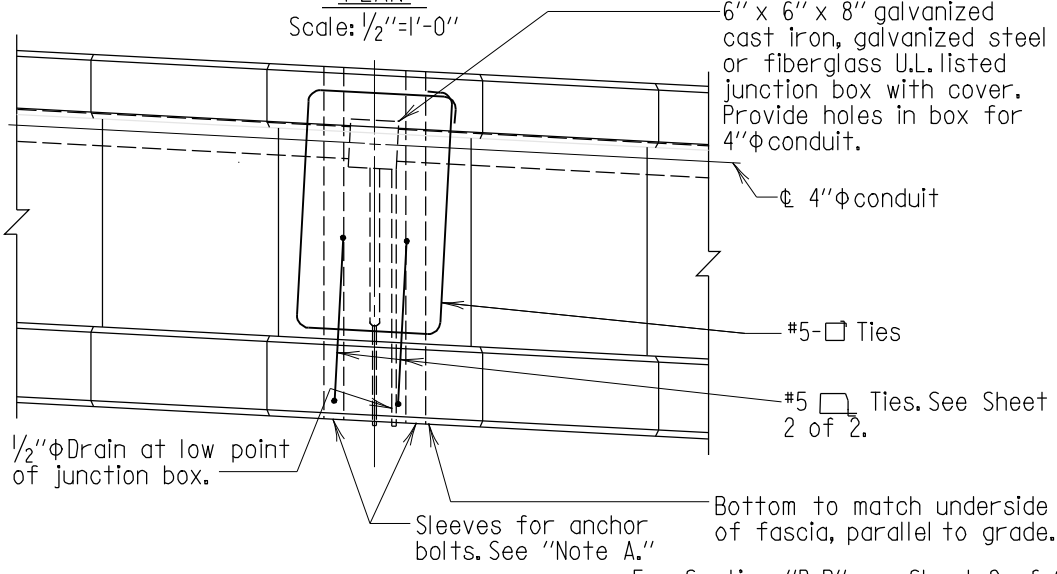
STANDARD NO. BR-SS(6.49)-05-351A SHEET 1 OF 2

SUPER-CONCRETE WORK



PLAN

Scale: ½"=1'-0"



For Section "B-B" see Sheet 2 of 2.

SECTION A-A

Scale: ½"=1'-0"

Note B:
Station for light post support bracket shown on Plans is only approximate. ℄ Bracket to be located midway between parapet control joints.
A = Normal parapet control joint spacing (adjust as necessary to meet minimum limitations).
If a light post is placed at ℄ of pier, eliminate the control joint at the ℄ of pier, The first control joint beyond, on one side only shall be changed to a paraffin joint.

Note:
Deck overhang reinforcing steel not shown.

Note A:
Contractor is to contact the District Engineer in writing prior to placing sleeves for anchor bolts, to ascertain the bolt circle dimension and size of anchor bolts that will be used on this project. All light poles to be set plumb using leveling nuts on anchor bolts. Max. height of pole for this detail is 40'.

34" RECESSED BACK

APPROVAL
E S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
10-9-07	·
1-9-08	·
·	·
·	·

FHWA APPROVAL		
DATE:	·	·

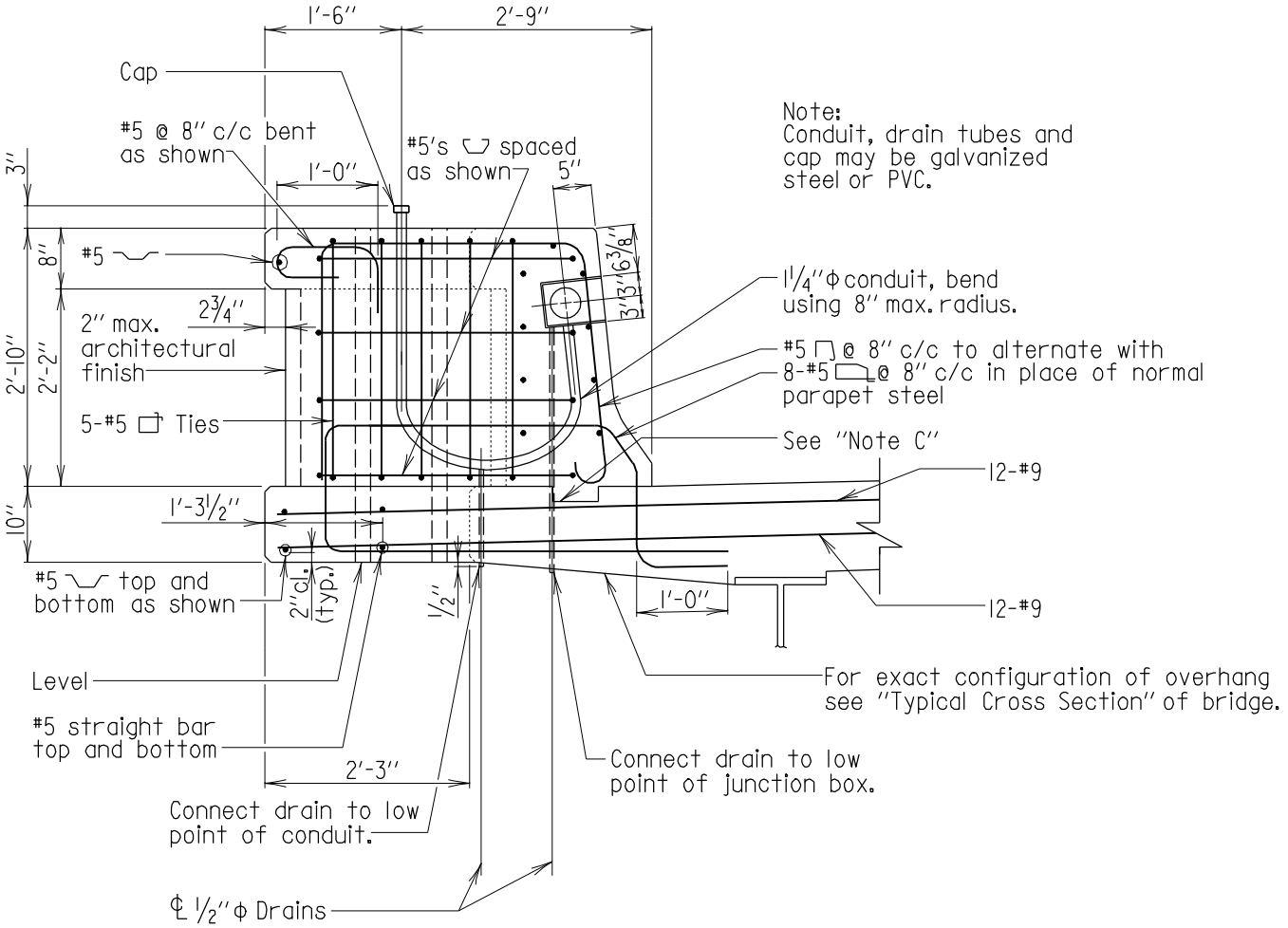
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

VERIFIED 10-9-2007 LRFD

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH SINGLE CONDUIT AND 34" F-SHAPE PARAPET WITH ARCHITECTURAL FINISH

STANDARD NO. BR-SS(6.49)-05-351A(L) SHEET 1 OF 2

SUPER-CONCRETE WORK



Note:
Conduit, drain tubes and cap may be galvanized steel or PVC.

SECTION B-B FOR 34" F-SHAPE BARRIER

Scale: ½"=1'-0"

Note:
All longitudinal bars are #5's and shall be placed continuously in the parapet from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multispan bridge. Refer to BR-SS(6.47)-03-349A.

Note C:
The constr. jt. between the F-shape parapet and the deck slab may vary slightly from the joint indicated. For exact details and location of the joint see "Superstructure" Sheet.

34" RECESSED BACK

APPROVAL
C S Friedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA

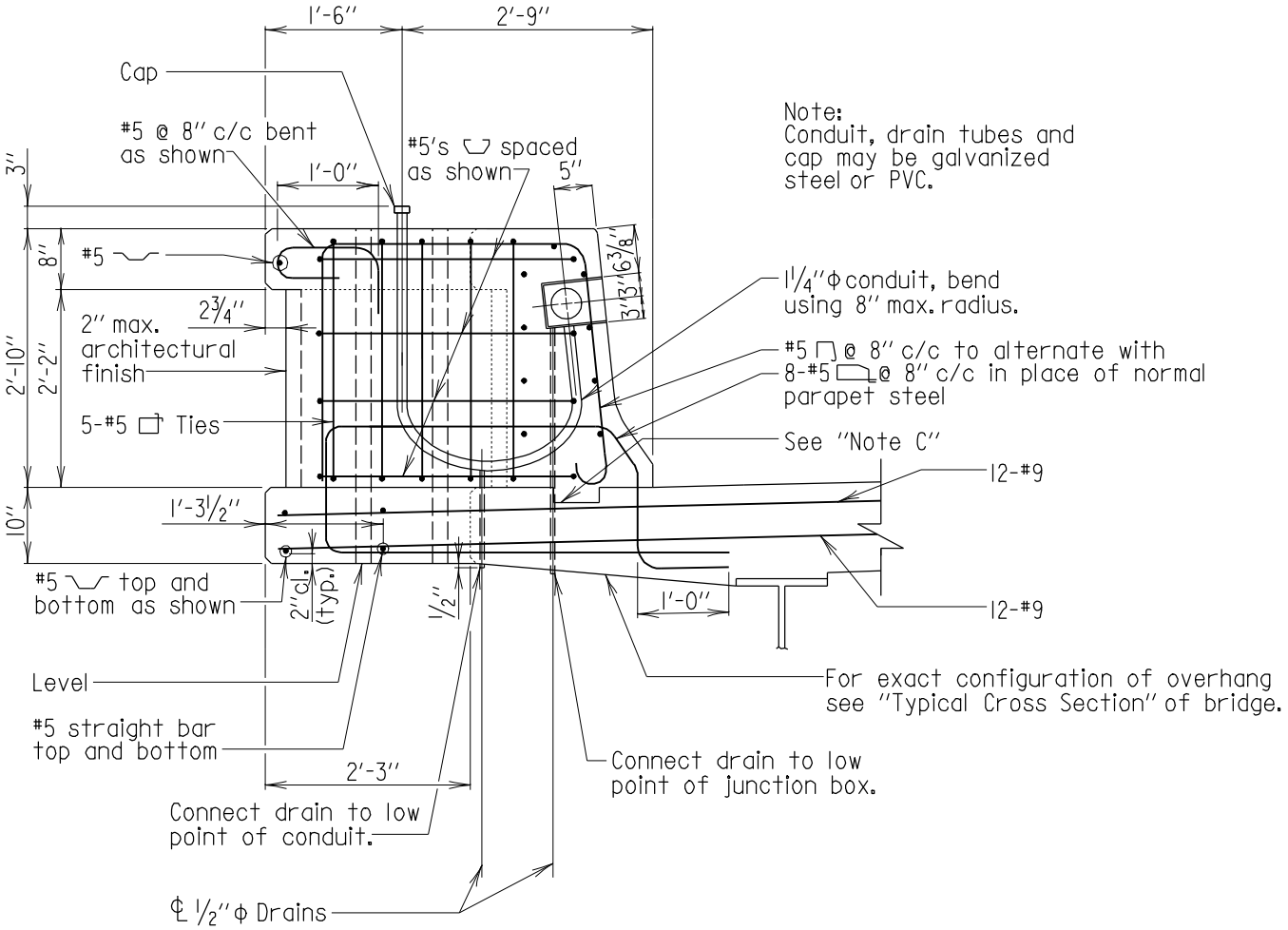
FHWA APPROVAL
DATE:

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH SINGLE CONDUIT AND 34" F-SHAPE PARAPET WITH ARCHITECTURAL FINISH

STANDARD NO. BR-SS(6.49)-05-351A SHEET 2 OF 2

SUPER-CONCRETE WORK



SECTION B-B FOR 34" F-SHAPE BARRIER

Scale: ½"=1'-0"

Note:
All longitudinal bars are #5's and shall be placed continuously in the parapet from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multispan bridge. Refer to BR-SS(6.47)-03-349A.

Note C:
The constr. jt. between the F-shape parapet and the deck may vary slightly from the joint indicated. For exact details and location of the joint see "Superstructure" Sheet.

34" RECESSED BACK

APPROVAL
C S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
10-9-07	·
·	·
·	·
·	·

FHWA APPROVAL
DATE: ·

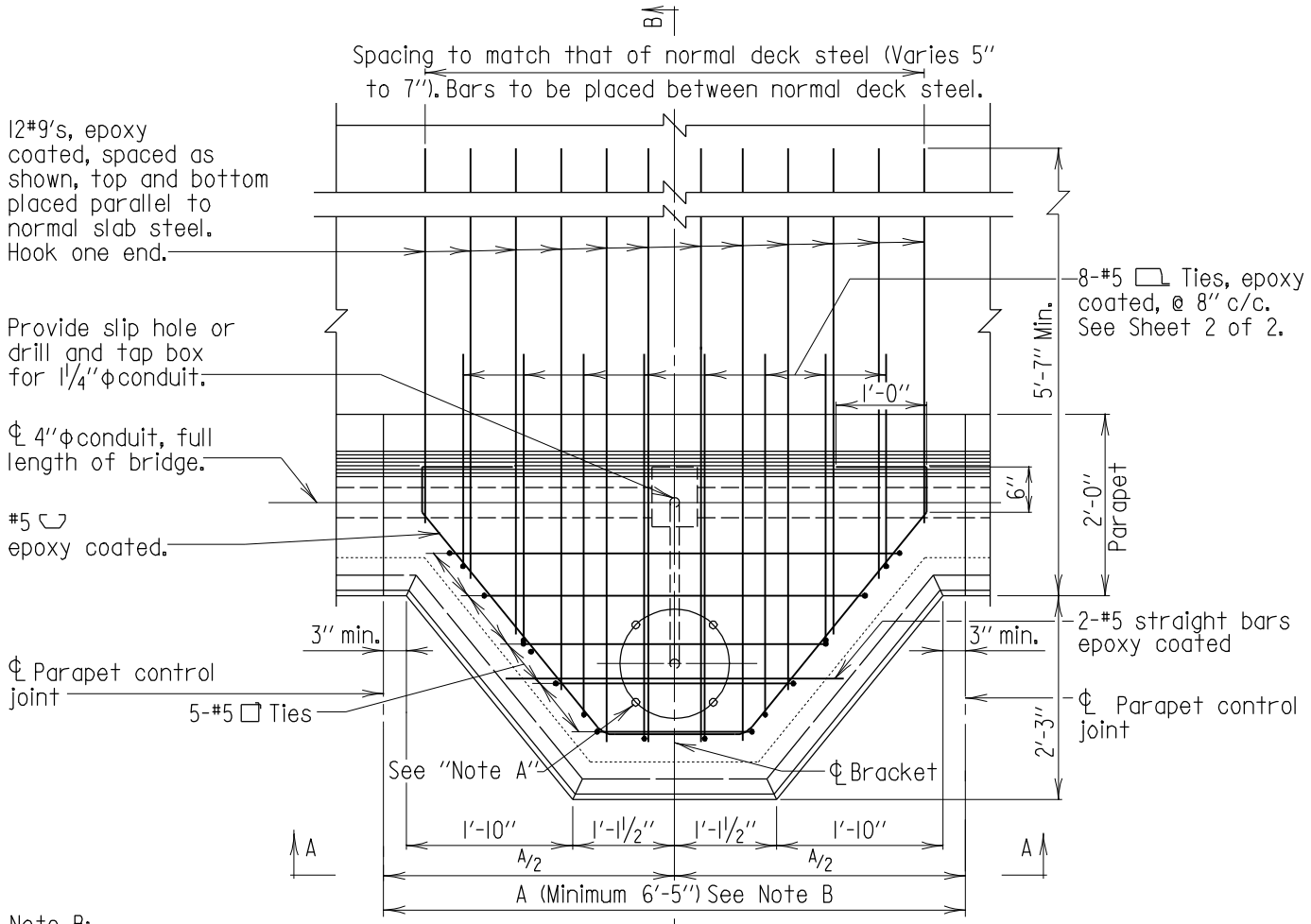
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

VERIFIED 10-9-2007 LRFD

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH SINGLE CONDUIT AND 34" F-SHAPE PARAPET WITH ARCHITECTURAL FINISH

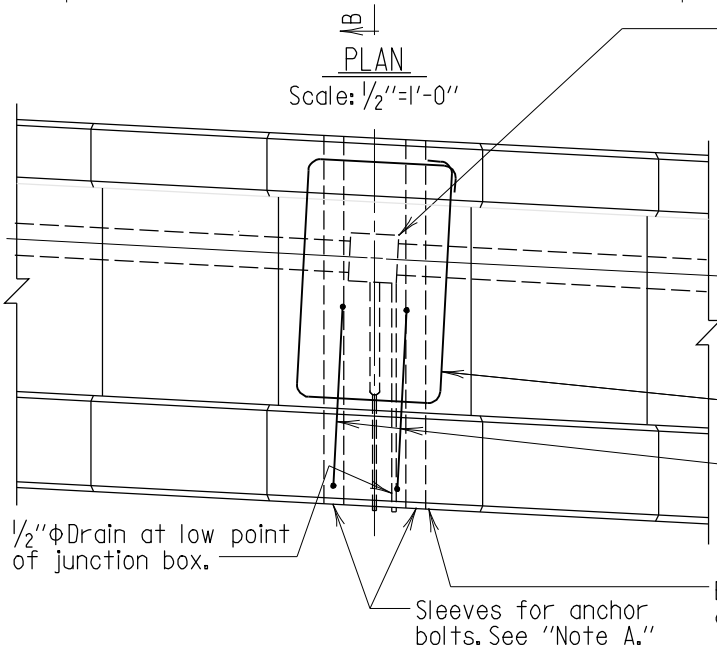
STANDARD NO. BR-SS(6.49)-05-351A(L) SHEET 2 OF 2

SUPER-CONCRETE WORK



PLAN

Scale: 1/2"=1'-0"



SECTION A-A

Scale: 1/2"=1'-0"

For Section "B-B" see Sheet 2 of 2.

Note B:
Station for light post support bracket shown on Plans is only approximate. ℄ Bracket to be located midway between parapet control joints.
A = Normal parapet control joint spacing (adjust as necessary to meet minimum limitations).
If a light post is placed at ℄ of pier, eliminate the control joint at the ℄ of pier, The first control joint beyond, on one side only shall be changed to a paraffin joint.

Note:
Normal slab reinforcing steel not shown.

Note A:
Contractor is to contact the District Engineer in writing prior to placing sleeves for anchor bolts, to ascertain the bolt circle dimension and size of anchor bolts that will be used on this project. All light poles to be set plumb using leveling nuts on anchor bolts. Max. height of pole for this detail is 40'.

42'' RECESSED BACK

APPROVAL
E S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
1-9-08	·
·	·
·	·
·	·

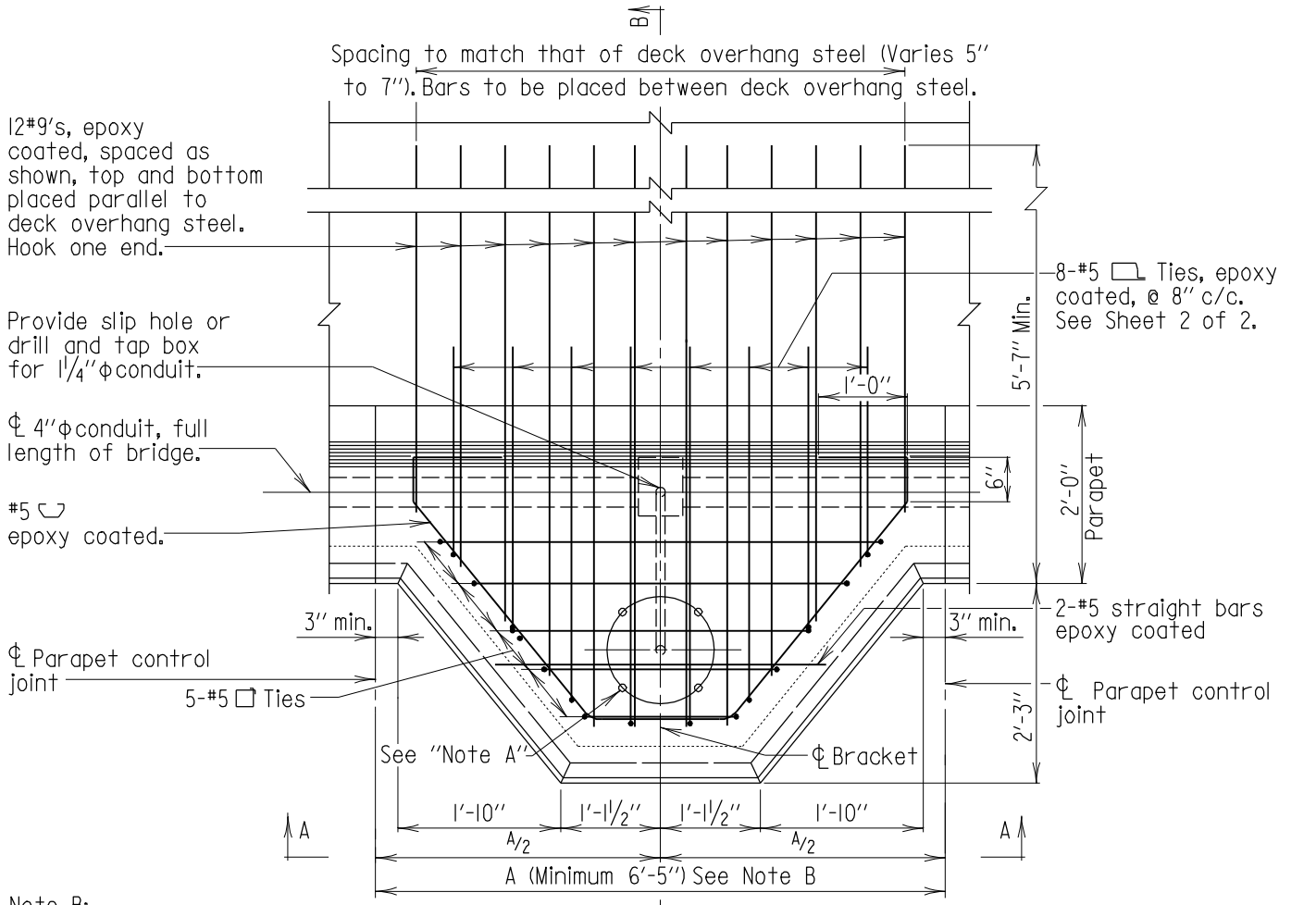
FHWA APPROVAL
DATE: .

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH SINGLE CONDUIT AND 42'' F-SHAPE PARAPET WITH ARCHITECTURAL FINISH

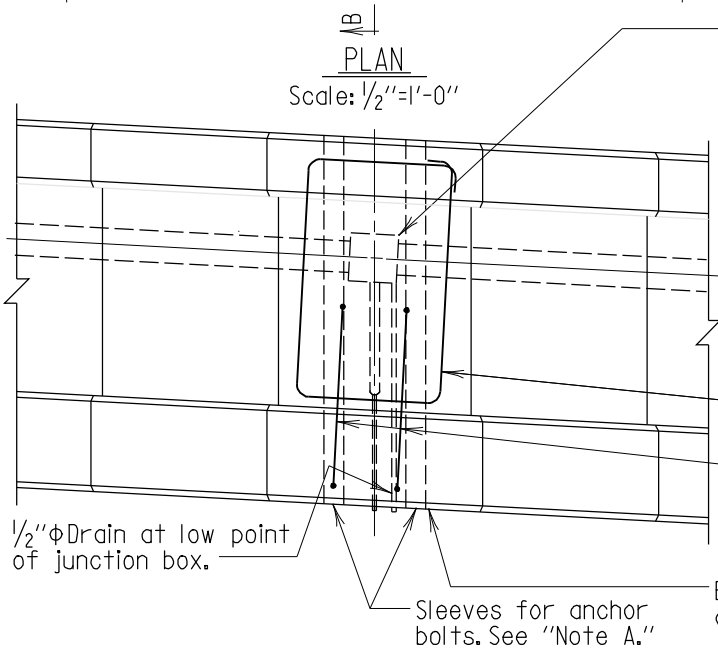
STANDARD NO. BR-SS(6.49)-05-351B SHEET 1 OF 2

SUPER-CONCRETE WORK



PLAN

Scale: ½"=1'-0"



SECTION A-A

Scale: ½"=1'-0"

For Section "B-B" see Sheet 2 of 2.

Note B:
Station for light post support bracket shown on Plans is only approximate. ℄ Bracket to be located midway between parapet control joints.
A = Normal parapet control joint spacing (adjust as necessary to meet minimum limitations).
If a light post is placed at ℄ of pier, eliminate the control joint at the ℄ of pier, The first control joint beyond, on one side only shall be changed to a paraffin joint.

Note:
Deck overhang reinforcing steel not shown.

Note A:
Contractor is to contact the District Engineer in writing prior to placing sleeves for anchor bolts, to ascertain the bolt circle dimension and size of anchor bolts that will be used on this project. All light poles to be set plumb using leveling nuts on anchor bolts. Max. height of pole for this detail is 40'.

42'' RECESSED BACK

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
10-9-07	·
1-9-08	·
·	·
·	·

FHWA APPROVAL		
DATE: .	·	·

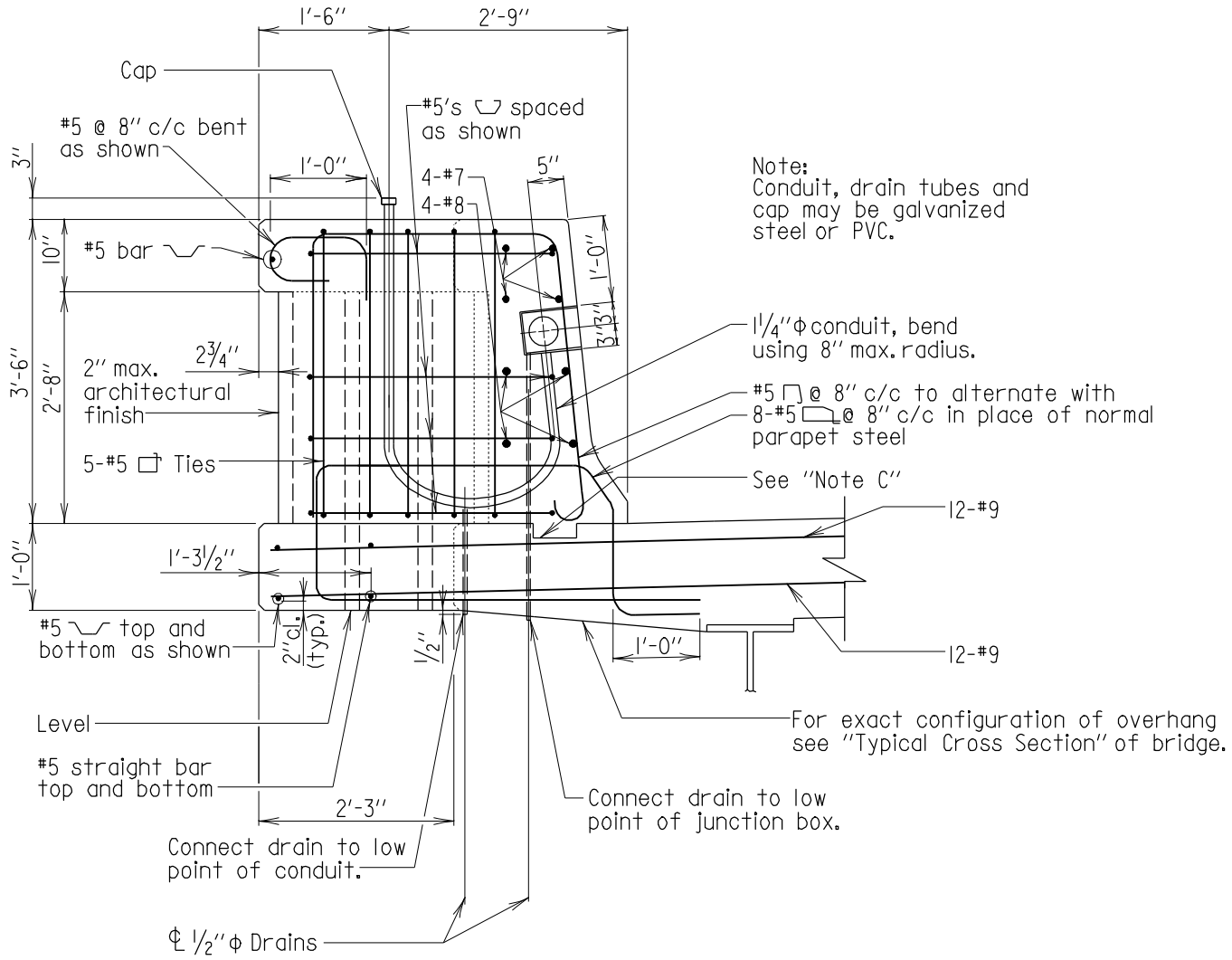
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

VERIFIED 10-9-2007 LRFD

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH SINGLE CONDUIT AND 42" F-SHAPE PARAPET WITH ARCHITECTURAL FINISH

STANDARD NO. BR-SS(6.49)-05-35IB(L) SHEET 1 OF 2

SUPER-CONCRETE WORK



SECTION B-B FOR 42" F-SHAPE BARRIER

Scale: 1/2"=1'-0"

Note:
All #7 and #8 bars shall be placed continuously in the parapet from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multispan bridge. Refer to BR-SS(6.47)-03-349B.

Note C:
The constr. jt. between the F-shape parapet and the deck slab may vary slightly from the joint indicated. For exact details and location of the joint see "Superstructure" Sheet.

42'' RECESSED BACK

APPROVAL
E S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA

FHWA APPROVAL
DATE:

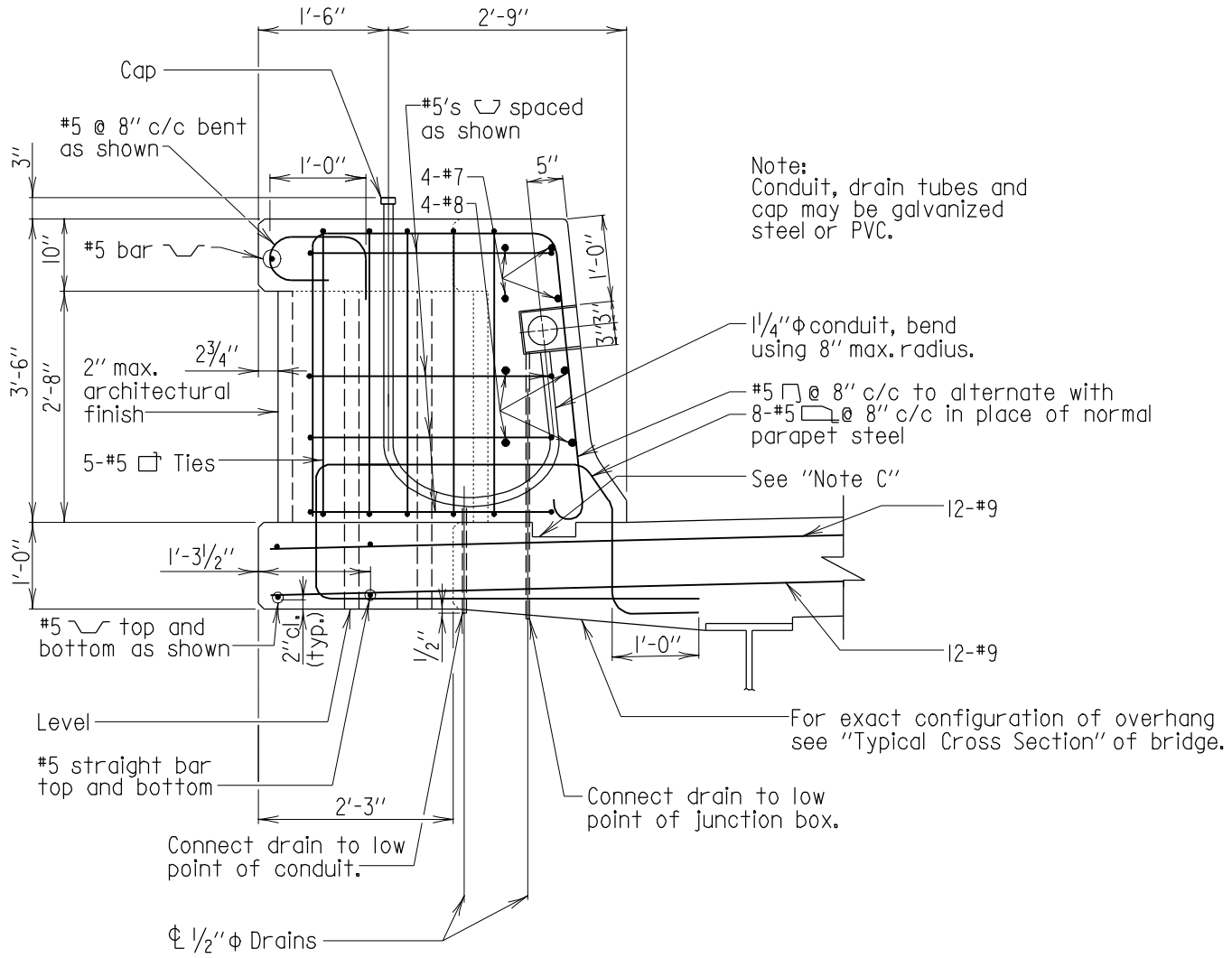
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH SINGLE CONDUIT AND 42" F-SHAPE PARAPET WITH ARCHITECTURAL FINISH

STANDARD NO. BR-SS(6.49)-05-351B

SHEET 2 OF 2

SUPER-CONCRETE WORK



SECTION B-B FOR 42" F-SHAPE BARRIER

Scale: 1/2"=1'-0"

Note:
All #7 and #8 bars shall be placed continuously in the parapet from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multispan bridge. Refer to BR-SS(6.47)-03-349B.

Note C:
The constr. jt. between the F-shape parapet and the deck may vary slightly from the joint indicated. For exact details and location of the joint see "Superstructure" Sheet.

42" RECESSED BACK

APPROVAL
E S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
10-9-07	·
·	·
·	·
·	·

FHWA APPROVAL
DATE: ·

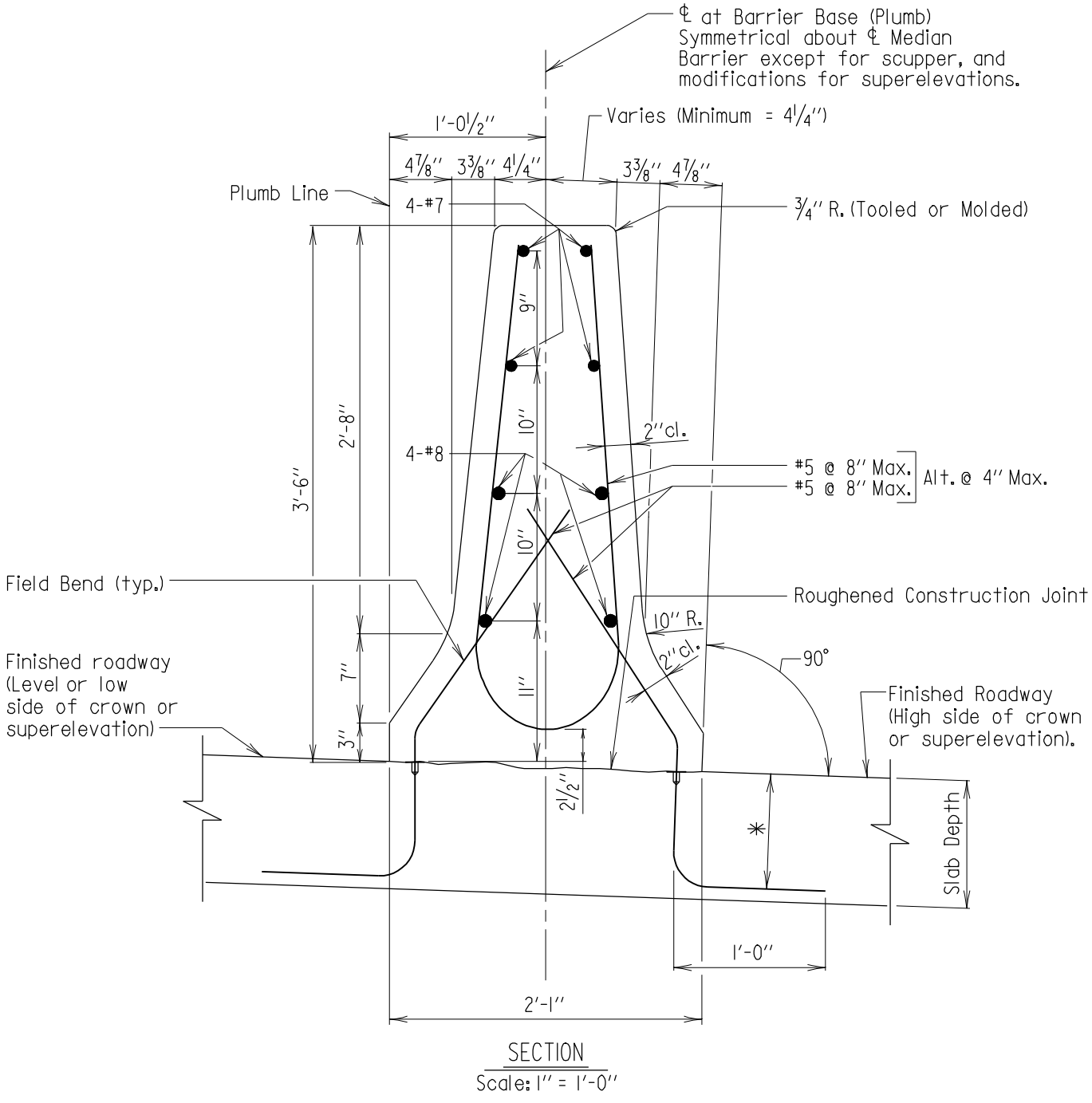
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

VERIFIED 10-9-2007 LRFD

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH SINGLE CONDUIT AND 42" F-SHAPE PARAPET WITH ARCHITECTURAL FINISH

STANDARD NO. BR-SS(6.49)-05-351B(L) SHEET 2 OF 2

SUPER-CONCRETE WORK



SECTION

Scale: 1" = 1'-0"

Notes:

1. All #7 and #8 longitudinal bars shall be placed continuously in the barrier from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multi span bridge.
2. All reinforcement bars shall be epoxy coated.
3. The Contractor has the option of substituting cast-in-place epoxy coated open coil inserts with threaded holes for the bars shown. The inserts in the back face of the parapet shall have a minimum working load tension strength of 6000 lb. and a minimum length of 4 1/2". The inserts in the front face shall have a minimum working load tension strength of 8000 lb. and a minimum length of 5 1/2". The cost of epoxy coated inserts shall be included in the pertinent Superstructure Concrete item.
4. Concrete deck reinforcing steel not shown.
5. Place 1/2" saw cut joints to match joint spacing of outside parapet.
6. No increase in any prices bid will be allowed for barrier modifications due to roadway slope or maintenance of traffic.

* Slab depth minus 1".

42'' MEDIAN

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
.	.
.	.
.	.
.	.

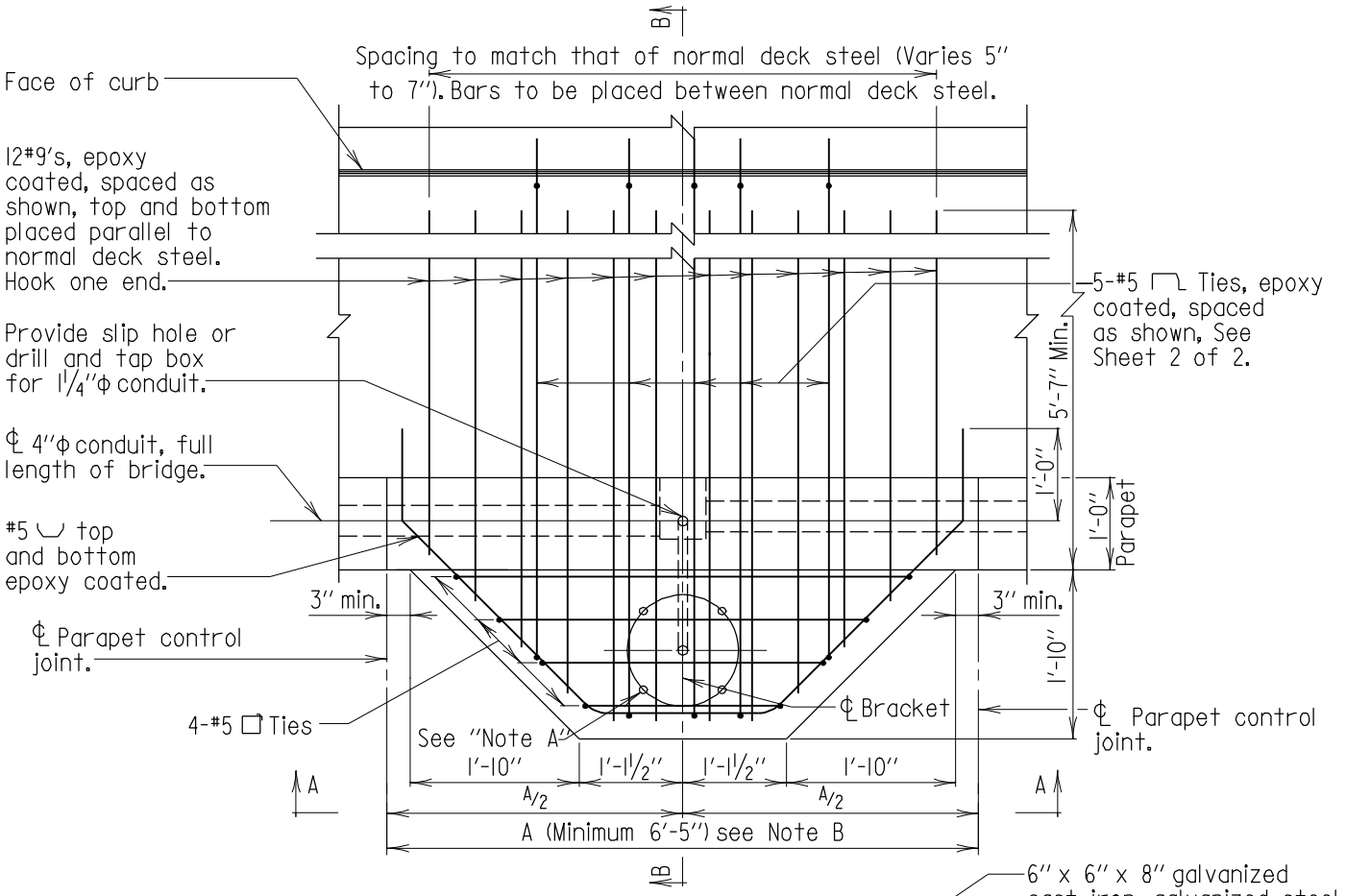
FHWA APPROVAL
DATE: .

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

42'' F-SHAPE MEDIAN BARRIER FOR BRIDGE WITHOUT LONGITUDINAL JOINT WHERE TRAFFIC WILL USE AREA PRIOR TO PLACING BARRIER

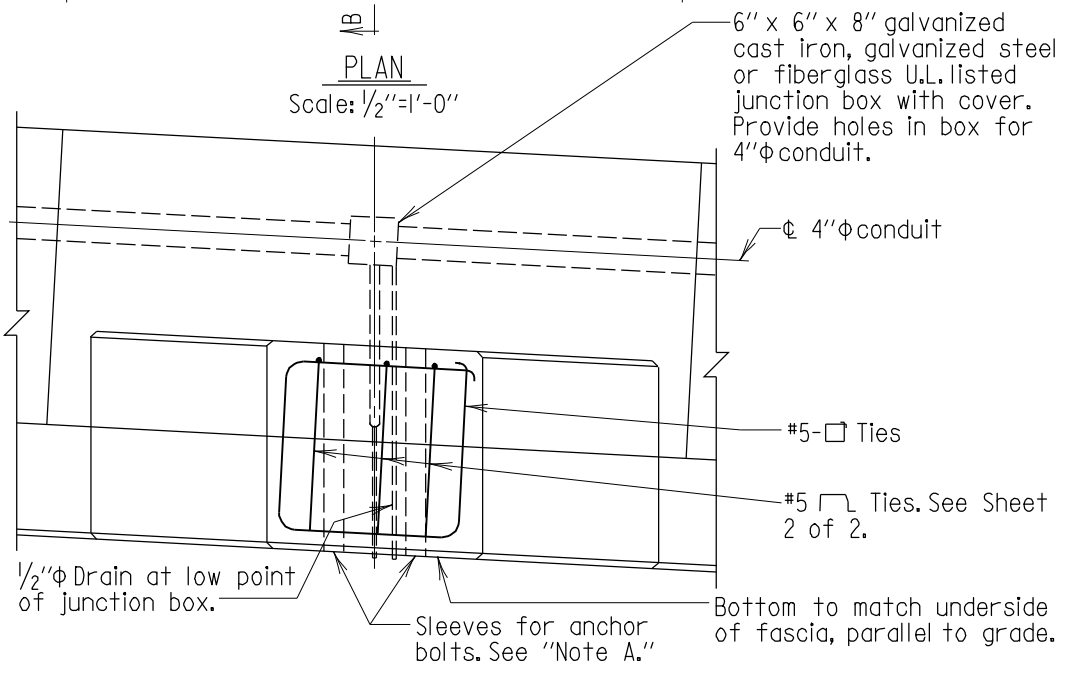
STANDARD NO. BR-SS(6.50)-03-352 SHEET 1 OF 1

SUPER CONCRETE WORK



PLAN

Scale: 1/2"=1'-0"



SECTION A-A

Scale: 1/2"=1'-0"

For Section "B-B" see Sheet 2 of 2.

Note B:
Station for light post support bracket shown on Plans is only approximate. ℄ Bracket to be located midway between parapet control joints.
A = Normal parapet control joint spacing (adjust as necessary to meet minimum limitations).
If a light post is placed at ℄ of pier, eliminate the control joint at the ℄ of pier, The first control joint beyond, on one side only shall be changed to a paraffin joint.

Note:
Normal deck reinforcing steel not shown.

Note A:
Contractor is to contact the District Engineer in writing prior to placing sleeves for anchor bolts, to ascertain the bolt circle dimension and size of anchor bolts that will be used on this project. All light poles to be set plumb using leveling nuts on anchor bolts. Max. height of pole for this detail is 40'.

SIDEWALK WITH STRAIGHT BACK

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
1-9-08	·
·	·
·	·
·	·

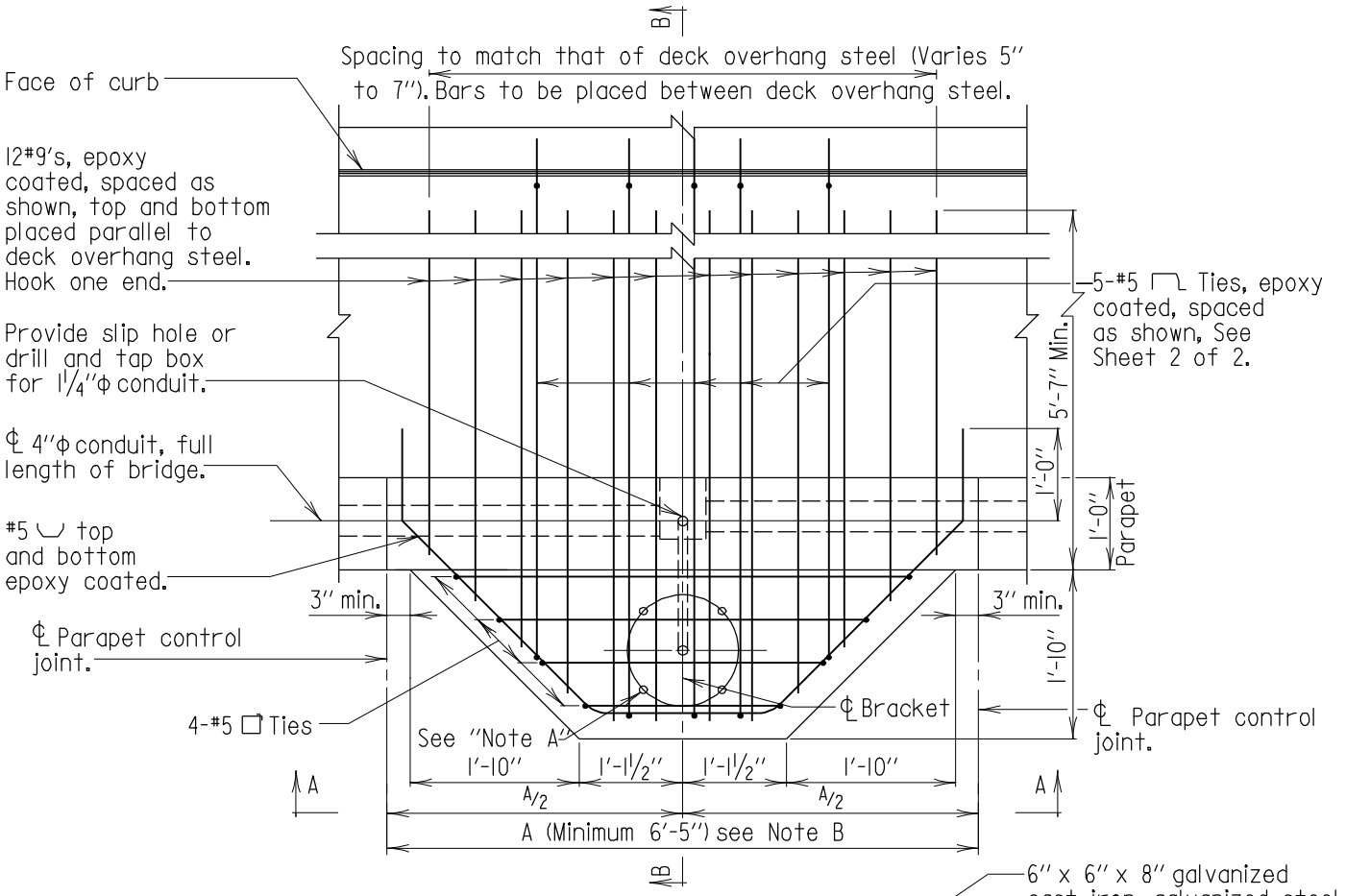
FHWA APPROVAL
DATE: ·

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH SINGLE CONDUIT AND PARAPET WITH STRAIGHT BACK AND SIDEWALK

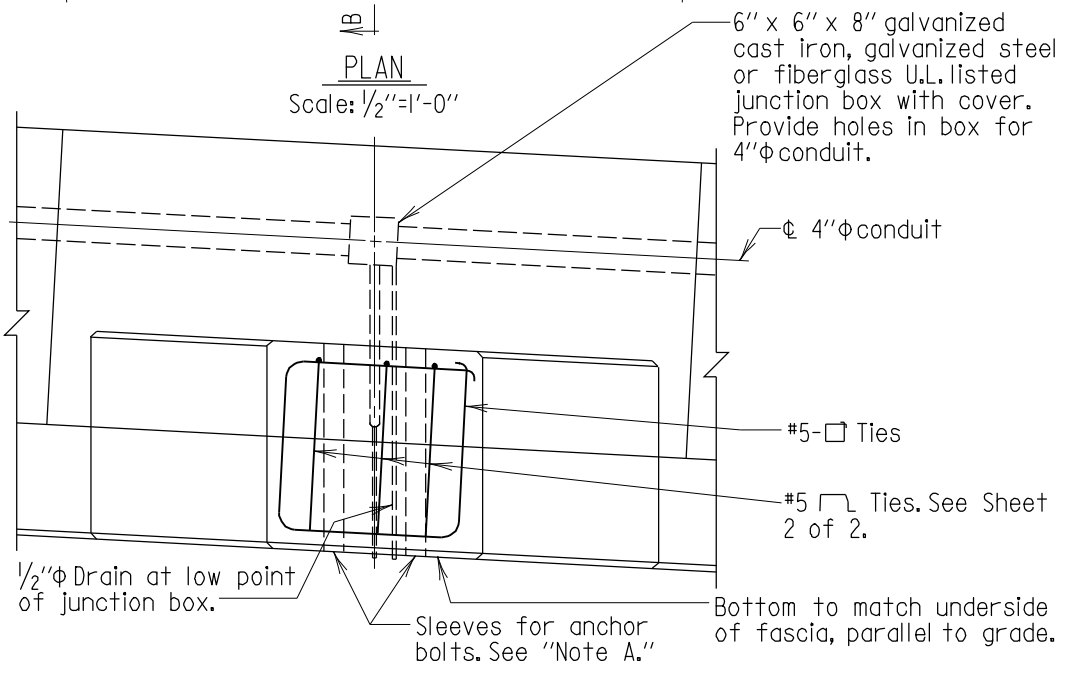
STANDARD NO. BR-SS(6.51)-05-353 SHEET 1 OF 2

SUPER-CONCRETE WORK



PLAN

Scale: ½"=1'-0"



SECTION A-A

Scale: ½"=1'-0"

For Section "B-B" see Sheet 2 of 2.

Note B:
Station for light post support bracket shown on Plans is only approximate. ℄ Bracket to be located midway between parapet control joints.
A = Normal parapet control joint spacing (adjust as necessary to meet minimum limitations).
If a light post is placed at ℄ of pier, eliminate the control joint at the ℄ of pier, The first control joint beyond, on one side only shall be changed to a paraffin joint.

Note:
Deck overhang reinforcing steel not shown.

Note A:
Contractor is to contact the District Engineer in writing prior to placing sleeves for anchor bolts, to ascertain the bolt circle dimension and size of anchor bolts that will be used on this project. All light poles to be set plumb using leveling nuts on anchor bolts. Max. height of pole for this detail is 40'.

SIDEWALK WITH STRAIGHT BACK

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
10-9-07	·
1-9-08	·
·	·
·	·

FHWA APPROVAL		
DATE:	·	·

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

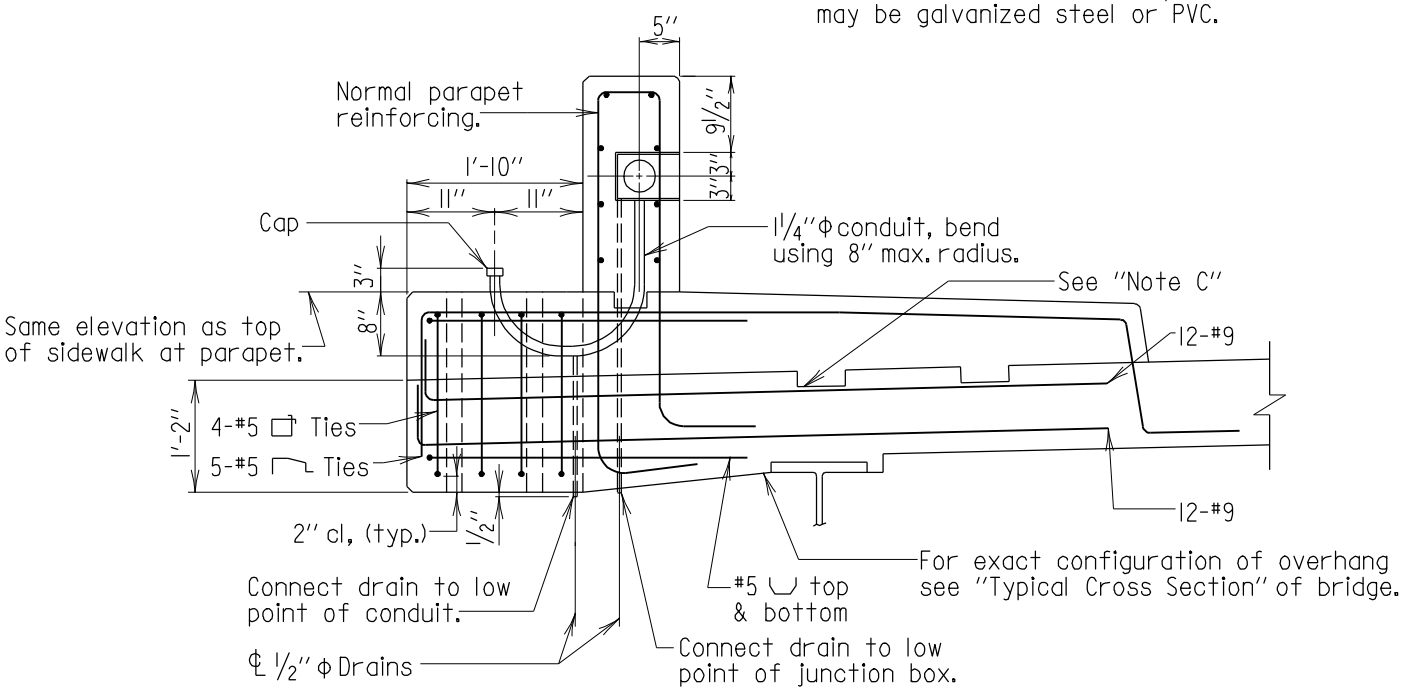
VERIFIED 10-9-2007 LRFD

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH SINGLE CONDUIT AND PARAPET WITH STRAIGHT BACK AND SIDEWALK

STANDARD NO. BR-SS(6.51)-05-353(L) SHEET 1 OF 2

SUPER-CONCRETE WORK

Note:
Conduit, drain tubes and cap
may be galvanized steel or PVC.



SECTION B-B FOR SIDEWALKS WITH PARAPET

Scale: 1/2''=1'-0''

Note:
All longitudinal bars are #5's and shall be placed continuously in the sidewalk from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multispan bridge. Refer to BR-SS(6.21)-03-106.

Note C:
The constr. jt. between the sidewalk and the deck may vary slightly from the joint indicated.
For exact details and location of the joint see ''Superstructure'' Sheet.

SIDEWALK STRAIGHT BACK

APPROVAL
C S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
.	.
.	.
.	.
.	.

FHWA APPROVAL
DATE: .

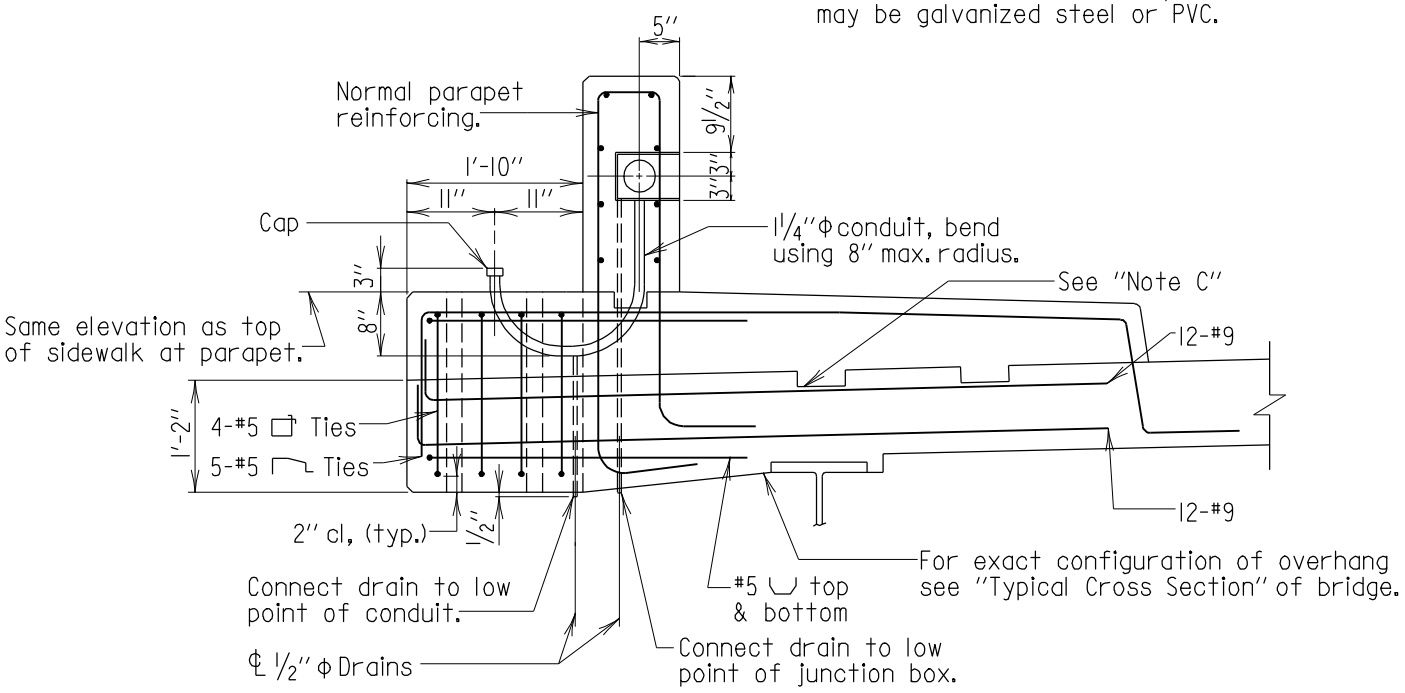
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST
WITH SINGLE CONDUIT AND PARAPET
WITH STRAIGHT BACK AND SIDEWALK

STANDARD NO. BR-SS(6.51)-05-353 SHEET 2 OF 2

SUPER-CONCRETE WORK

Note:
Conduit, drain tubes and cap
may be galvanized steel or PVC.



SECTION B-B FOR SIDEWALKS WITH PARAPET

Scale: 1/2''=1'-0''

Note:
All longitudinal bars are #5's and shall be placed continuously in the sidewalk from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multispan bridge. Refer to BR-SS(6.21)-03-106.

Note C:
The constr. jt. between the sidewalk and the deck may vary slightly from the joint indicated.
For exact details and location of the joint see ''Superstructure'' Sheet.

SIDEWALK STRAIGHT BACK

APPROVAL
C S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
10-9-07	·
·	·
·	·
·	·

FHWA APPROVAL
DATE: .

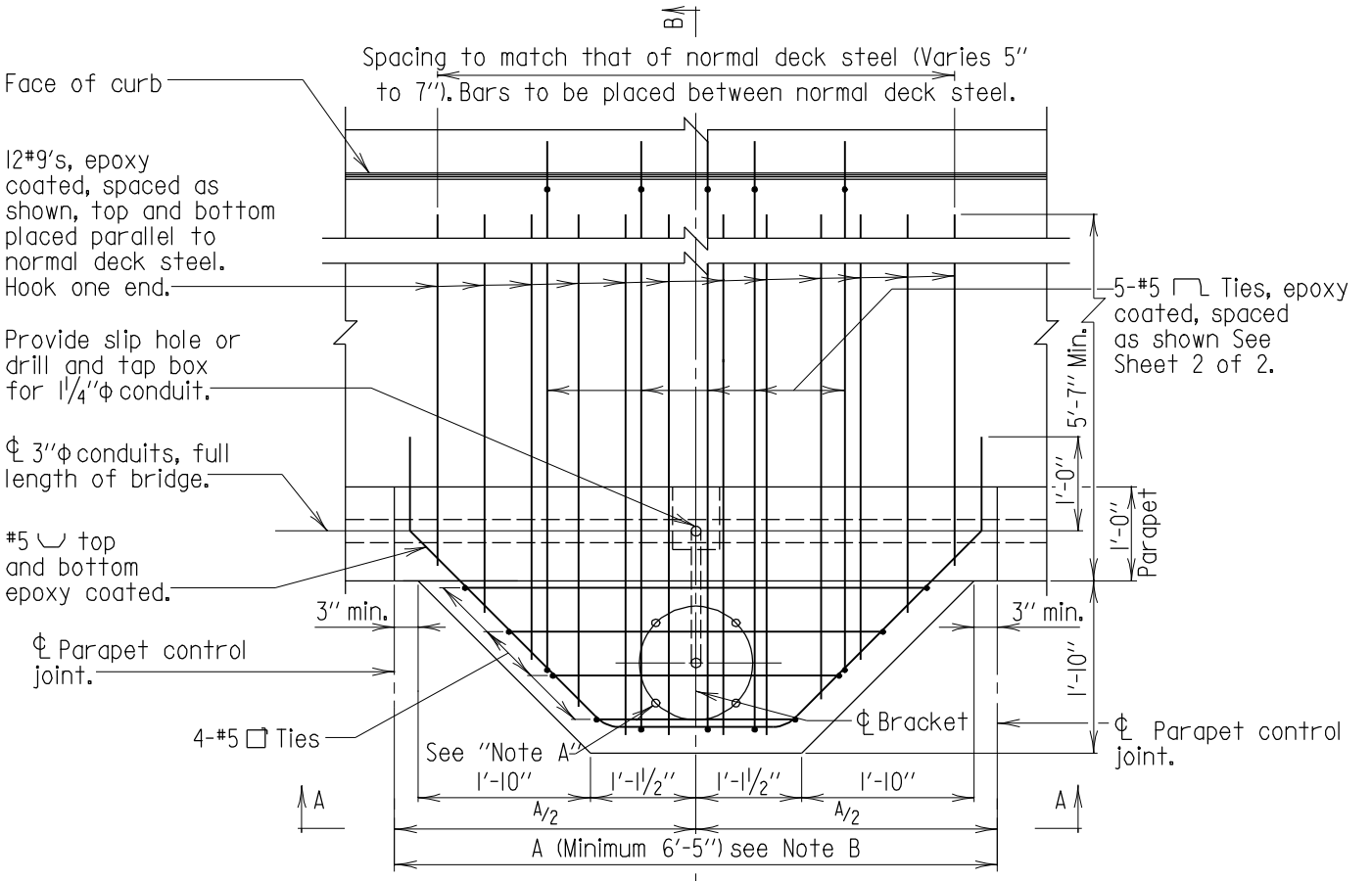
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

VERIFIED 10-9-2007 LRFD

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST
WITH SINGLE CONDUIT AND PARAPET
WITH STRAIGHT BACK AND SIDEWALK

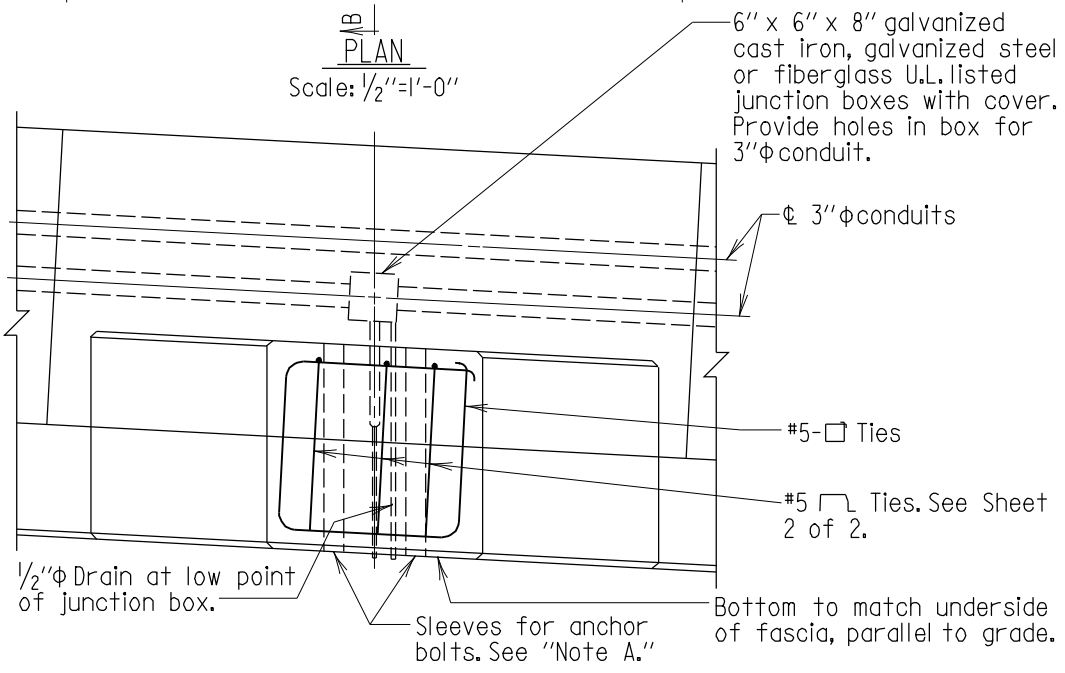
STANDARD NO. BR-SS(6.51)-05-353(L) SHEET 2 OF 2

SUPER-CONCRETE WORK



PLAN

Scale: 1/2"=1'-0"



SECTION A-A

Scale: 1/2"=1'-0"

For Section "B-B" see Sheet 2 of 2.

Note B:
Station for light post support bracket shown on Plans is only approximate. ℄ Bracket to be located midway between parapet control joints.
A = Normal parapet control joint spacing (adjust as necessary to meet minimum limitations).
If a light post is placed at ℄ of pier, eliminate the control joint at the ℄ of pier, The first control joint beyond, on one side only shall be changed to a paraffin joint.

Note:
Normal deck reinforcing steel not shown.

Note A:
Contractor is to contact the District Engineer in writing prior to placing sleeves for anchor bolts, to ascertain the bolt circle dimension and size of anchor bolts that will be used on this project. All light poles to be set plumb using leveling nuts on anchor bolts. Max. height of pole for this detail is 40'.

SIDEWALK WITH STRAIGHT BACK

APPROVAL
E S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
1-9-08	·
·	·
·	·
·	·

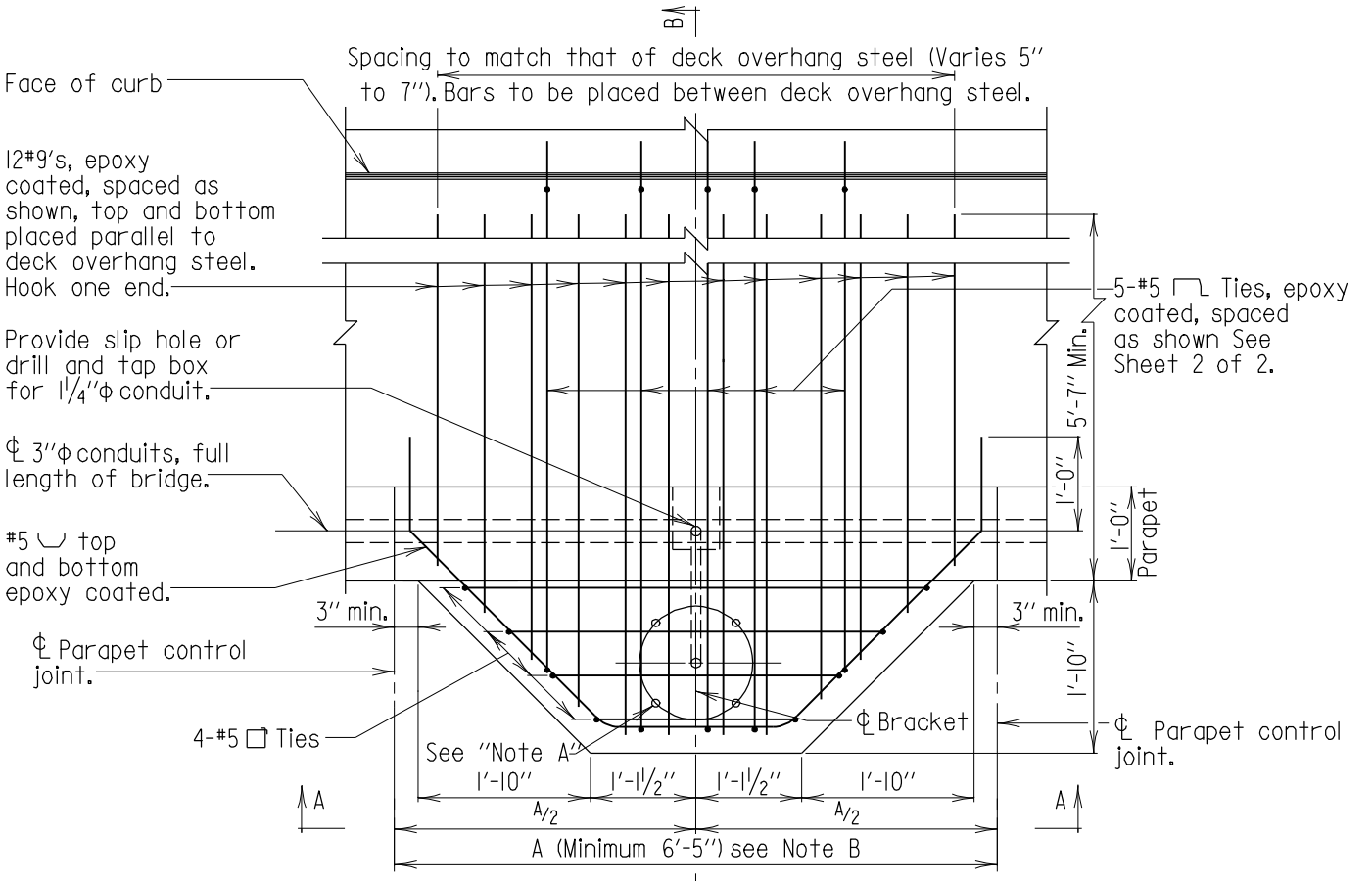
FHWA APPROVAL
DATE: ·

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH DUAL CONDUITS AND PARAPET WITH STRAIGHT BACK AND SIDEWALK

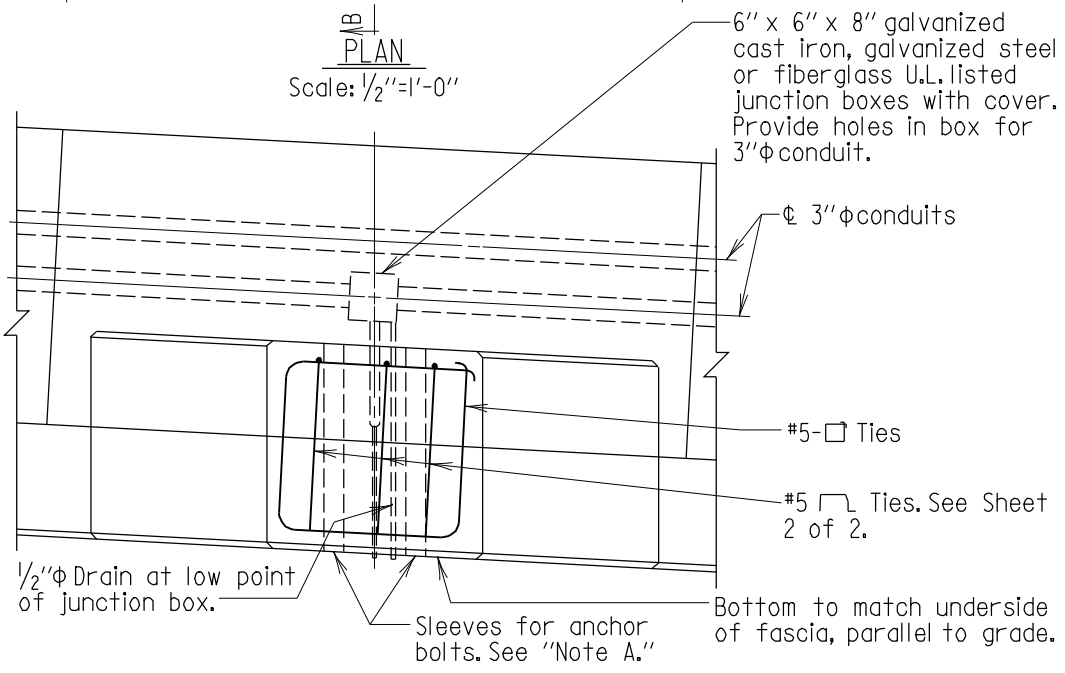
STANDARD NO. BR-SS(6.52)-05-354 SHEET 1 OF 2

SUPER-CONCRETE WORK



PLAN

Scale: 1/2"=1'-0"



SECTION A-A

Scale: 1/2"=1'-0"

Note B:
Station for light post support bracket shown on Plans is only approximate. ℄ Bracket to be located midway between parapet control joints.
A = Normal parapet control joint spacing (adjust as necessary to meet minimum limitations).
If a light post is placed at ℄ of pier, eliminate the control joint at the ℄ of pier, The first control joint beyond, on one side only shall be changed to a paraffin joint.

Note:
Deck overhang reinforcing steel not shown.

Note A:
Contractor is to contact the District Engineer in writing prior to placing sleeves for anchor bolts, to ascertain the bolt circle dimension and size of anchor bolts that will be used on this project. All light poles to be set plumb using leveling nuts on anchor bolts. Max. height of pole for this detail is 40'.

For Section "B-B" see Sheet 2 of 2.

SIDEWALK WITH STRAIGHT BACK

APPROVAL	
E S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.	
DATE: 6/1/05	
REVISIONS	
SHA	FHWA
10-9-07	·
1-9-08	·
FHWA APPROVAL	· ·
DATE: .	· ·

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

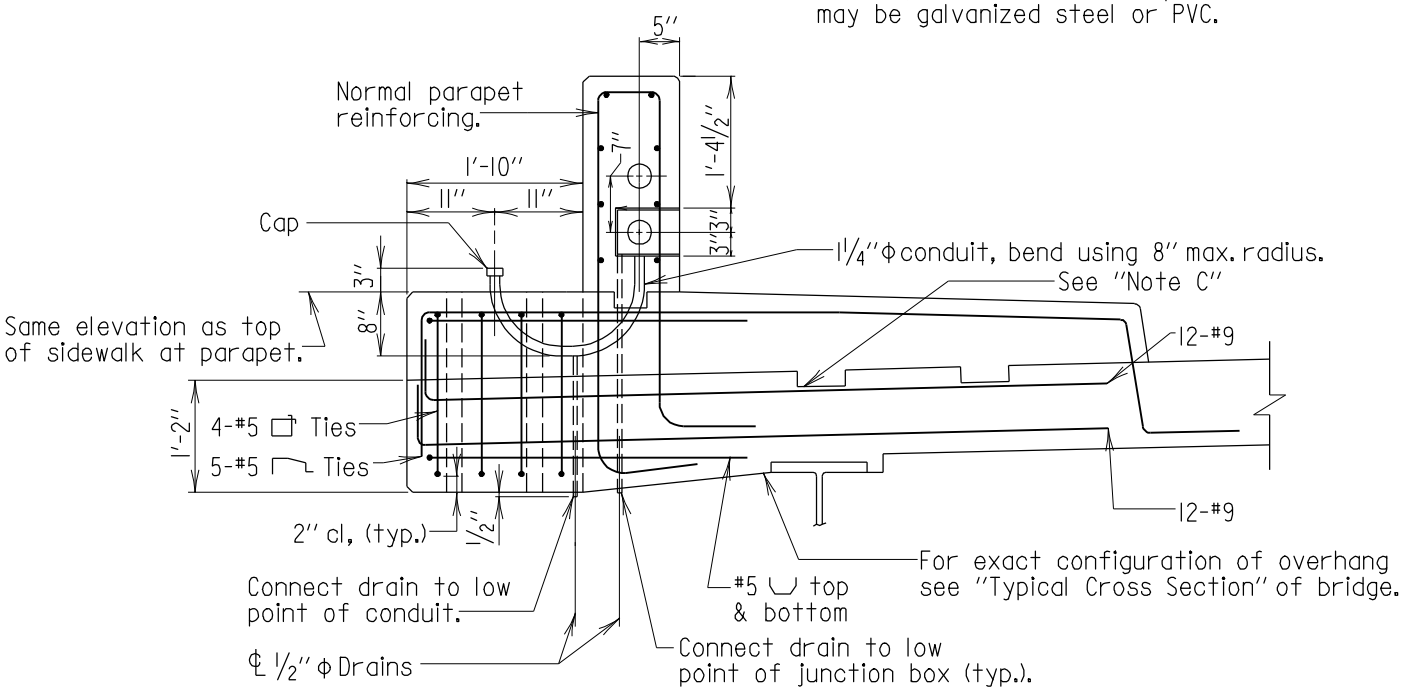
VERIFIED 10-9-2007 LRFD

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH DUAL CONDUITS AND PARAPET WITH STRAIGHT BACK AND SIDEWALK

STANDARD NO. BR-SS(6.52)-05-354(L) SHEET 1 OF 2

SUPER-CONCRETE WORK

Note:
Conduit, drain tubes and cap
may be galvanized steel or PVC.



SECTION B-B FOR SIDEWALKS WITH PARAPET

Scale: 1/2''=1'-0''

Note:
All longitudinal bars are #5's and shall be placed continuously in the sidewalk from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multispan bridge. Refer to BR-SS(6.21)-03-106.

Note C:
The constr. jt. between the sidewalk and the deck may vary slightly from the joint indicated.
For exact details and location of the joint see ''Superstructure'' Sheet.

SIDEWALK WITH STRAIGHT BACK

APPROVAL
E S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
.	.
.	.
.	.
.	.

FHWA APPROVAL
DATE: .

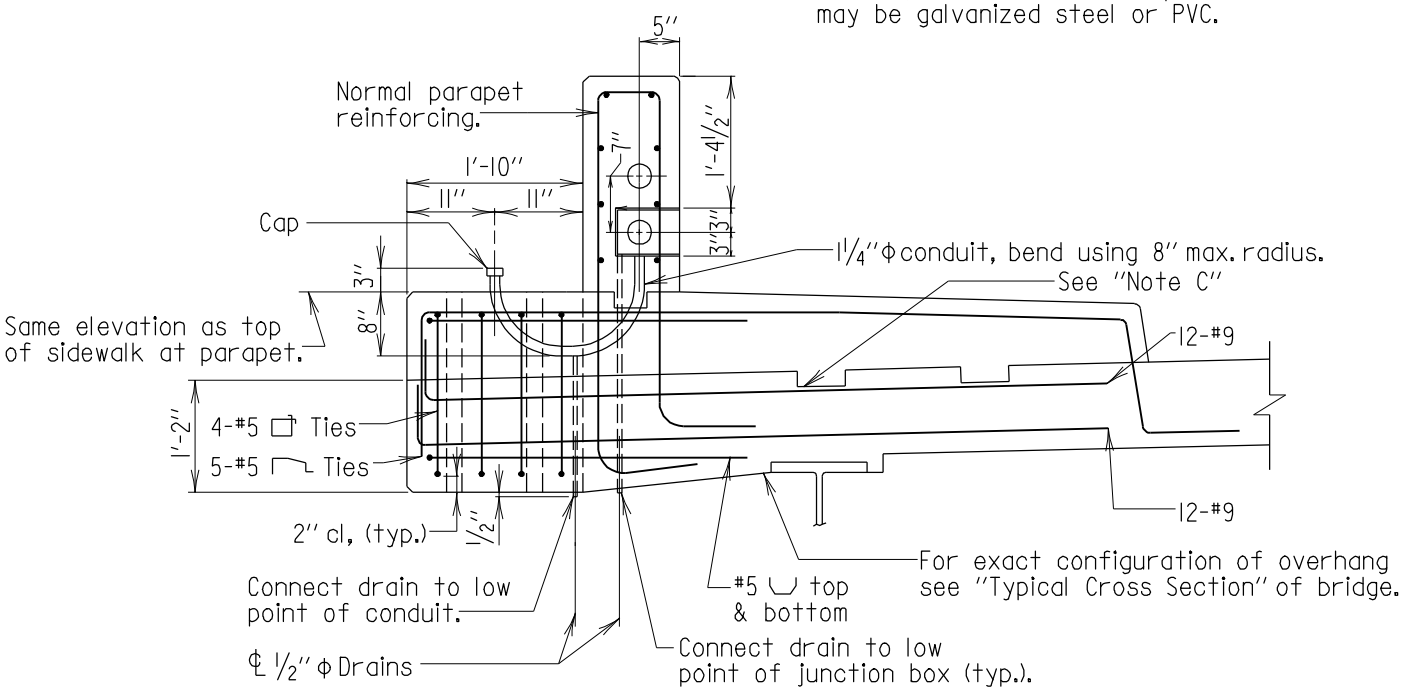
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST
WITH DUAL CONDUITS AND PARAPET
WITH STRAIGHT BACK AND SIDEWALK

STANDARD NO. BR-SS(6.52)-05-354 SHEET 2 OF 2

SUPER-CONCRETE WORK

Note:
Conduit, drain tubes and cap
may be galvanized steel or PVC.



SECTION B-B FOR SIDEWALKS WITH PARAPET

Scale: 1/2''=1'-0''

Note:
All longitudinal bars are #5's and shall be placed continuously in the sidewalk from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multispan bridge. Refer to BR-SS(6.21)-03-106.

Note C:
The constr. jt. between the sidewalk and the deck may vary slightly from the joint indicated.
For exact details and location of the joint see ''Superstructure'' Sheet.

SIDEWALK WITH STRAIGHT BACK

APPROVAL
E S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
10-9-07	·
·	·
·	·
·	·

FHWA APPROVAL
DATE: ·

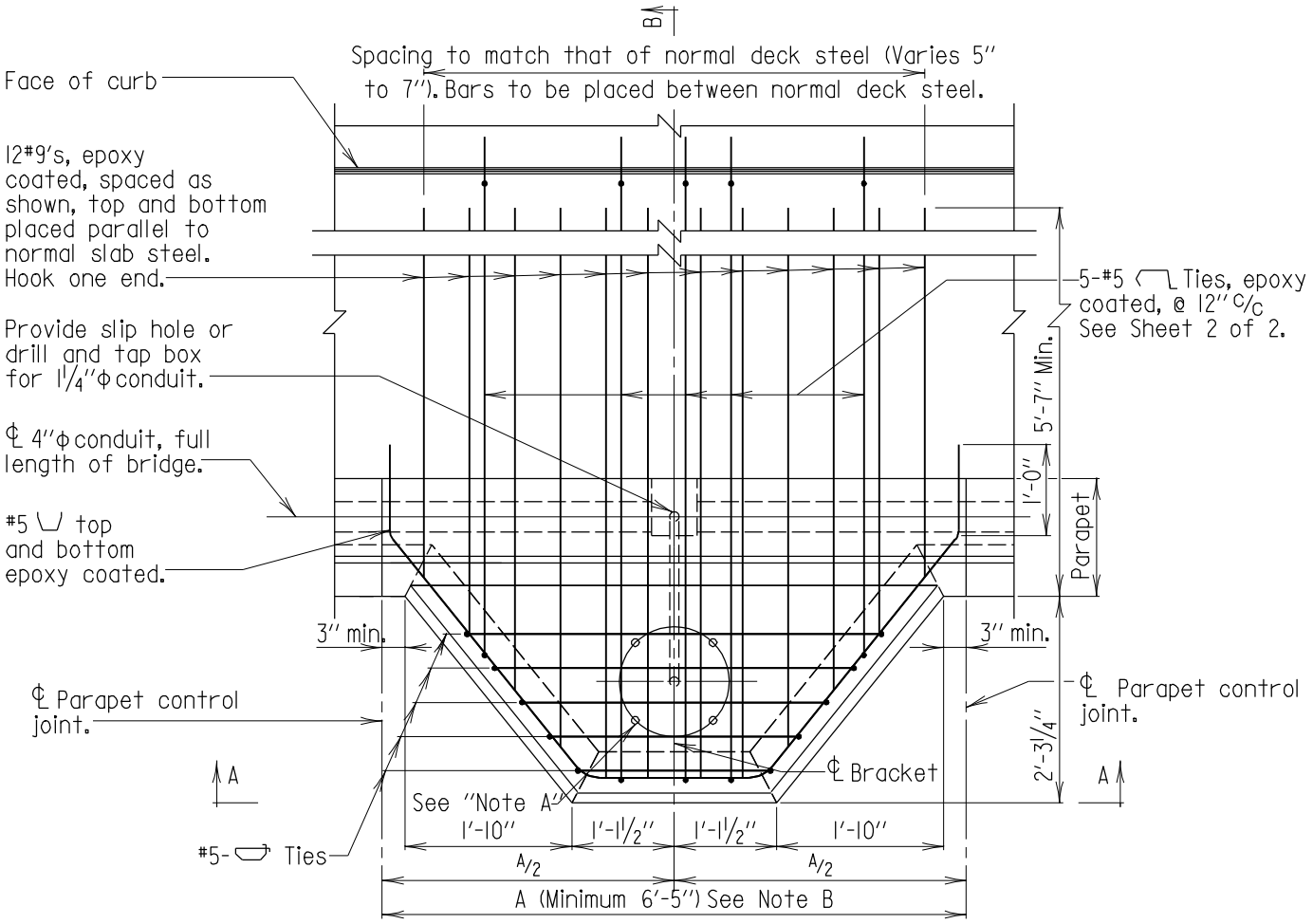
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

VERIFIED 10-9-2007 LRFD

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST
WITH DUAL CONDUITS AND PARAPET
WITH STRAIGHT BACK AND SIDEWALK

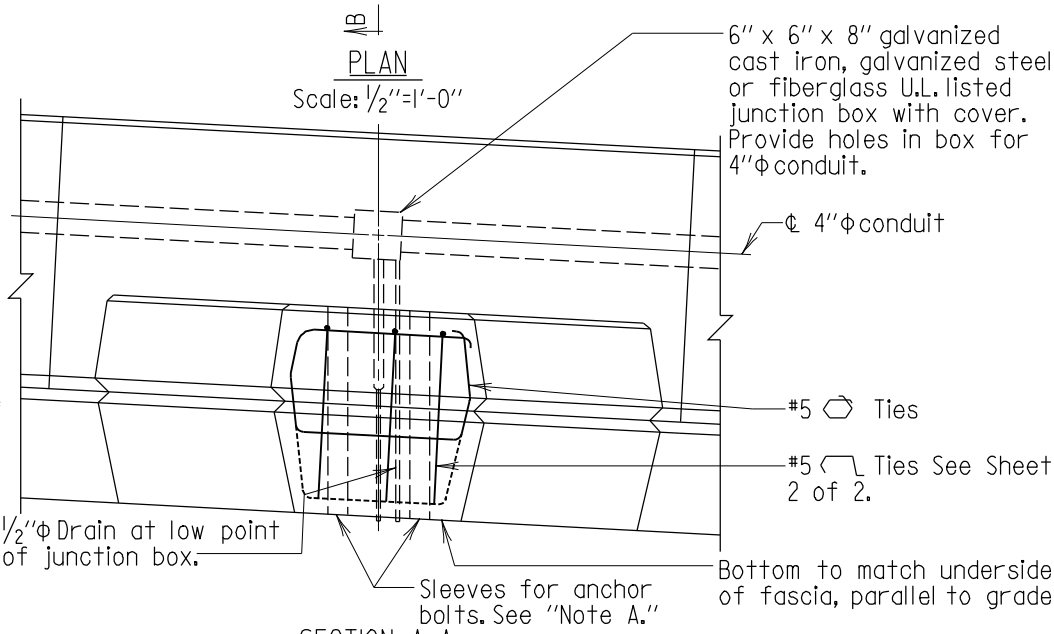
STANDARD NO. BR-SS(6.52)-05-354(L) SHEET 2 OF 2

SUPER-CONCRETE WORK



PLAN

Scale: 1/2"=1'-0"



SECTION A-A

Scale: 1/2"=1'-0"

For Section "B-B" see Sheet 2 of 2.

Note B:
Station for light post support bracket shown on Plans is only approximate. ℄ Bracket to be located midway between parapet control joints.
A= Normal parapet contol joint spacing (Adjust as necessary to meet minimum limitations).
If a light post is placed at ℄ of pier, eliminate the control joint at the ℄ of pier, The first control joint beyond, on one side only shall be changed to a paraffin joint.

Note:
Normal slab reinforcing steel not shown.

Note A:
Contractor is to contact the District Engineer in writing prior to placing sleeves for anchor bolts, to ascertain the bolt circle dimension and size of anchor bolts that will be used on this project. All light poles to be set plumb using leveling nuts on anchor bolts. Max. height of pole for this detail is 40'.

SIDEWALK WITH DIAMOND BACK

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
1-9-08	·
·	·
·	·
·	·

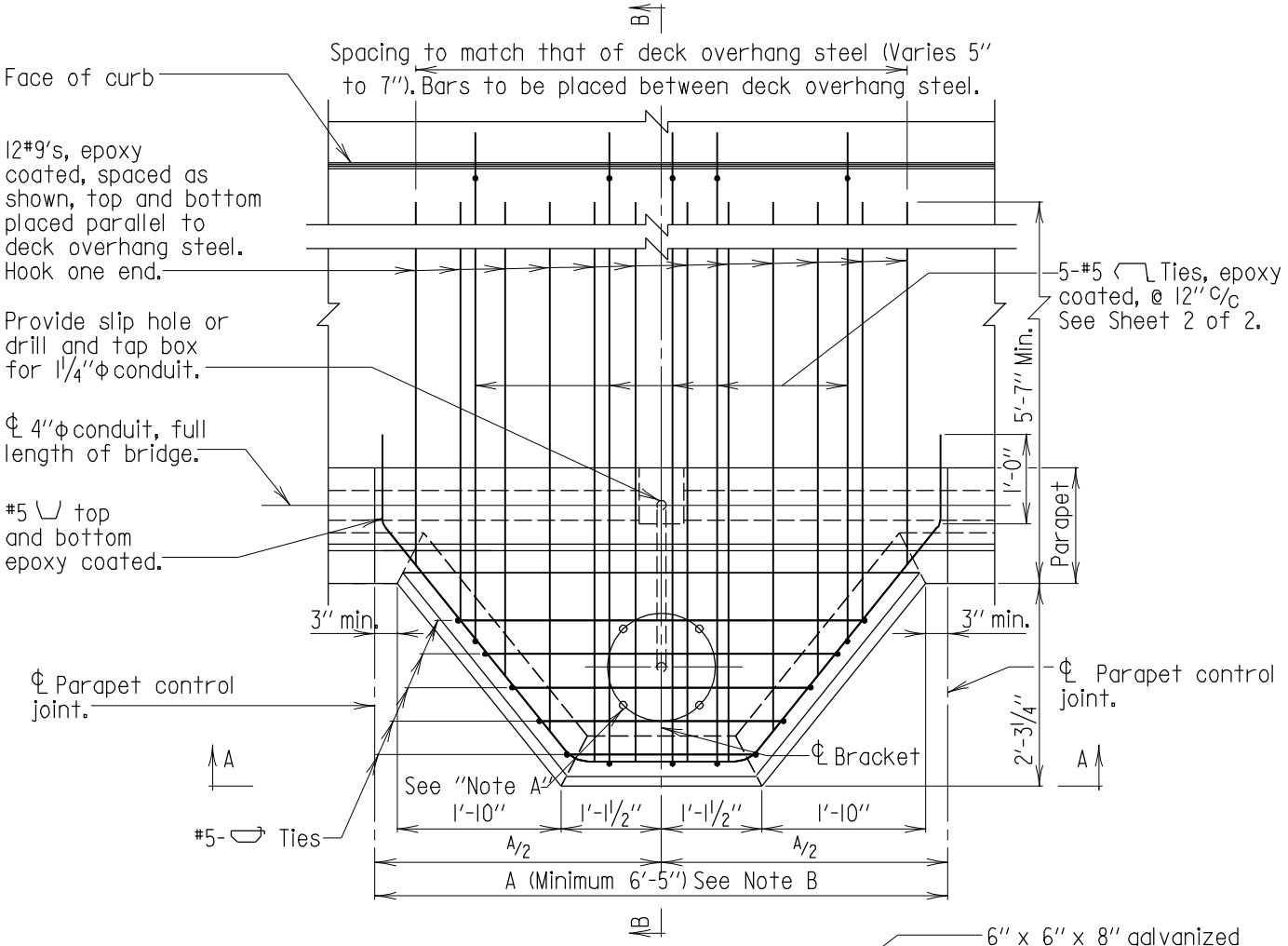
FHWA APPROVAL
DATE: .

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH SINGLE CONDUIT AND PARAPET WITH DIAMOND BACK AND SIDEWALK

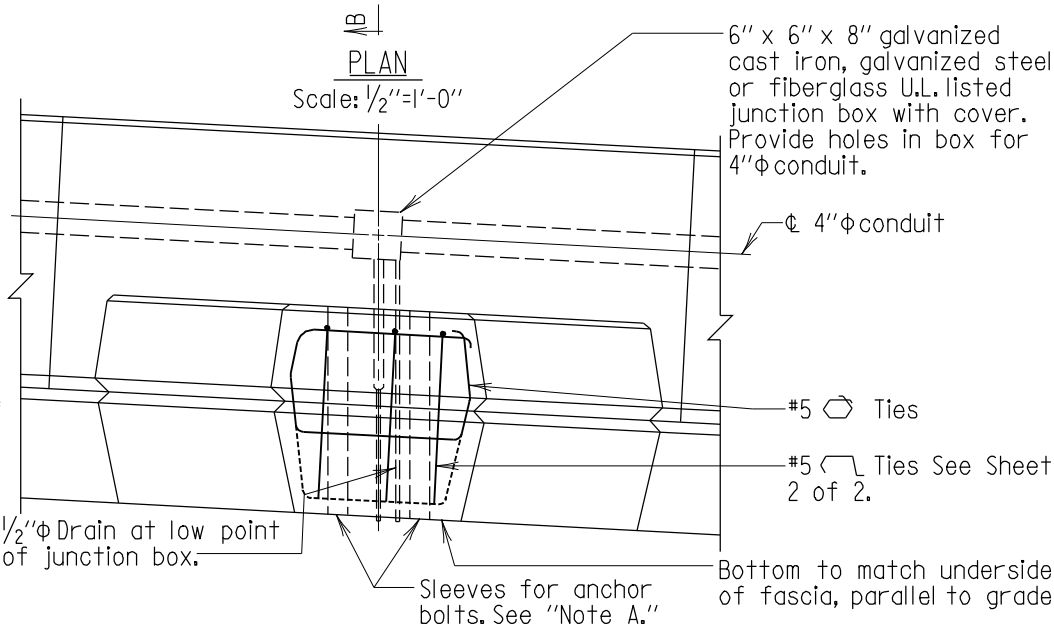
STANDARD NO. BR-SS(6.53)-05-355 SHEET 1 OF 2

SUPER-CONCRETE WORK



PLAN

Scale: 1/2"=1'-0"



SECTION A-A

Scale: 1/2"=1'-0"

For Section "B-B" see Sheet 2 of 2.

Note B:
Station for light post support bracket shown on Plans is only approximate. ℄ Bracket to be located midway between parapet control joints.
A= Normal parapet contol joint spacing (Adjust as necessary to meet minimum limitations).
If a light post is placed at ℄ of pier, eliminate the control joint at the ℄ of pier, The first control joint beyond, on one side only shall be changed to a paraffin joint.

Note:
Deck overhang reinforcing steel not shown.

Note A:
Contractor is to contact the District Engineer in writing prior to placing sleeves for anchor bolts, to ascertain the bolt circle dimension and size of anchor bolts that will be used on this project. All light poles to be set plumb using leveling nuts on anchor bolts. Max. height of pole for this detail is 40'.

SIDEWALK WITH DIAMOND BACK

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
10-9-07	·
1-9-08	·
·	·
·	·

FHWA APPROVAL		
DATE: .	·	·

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

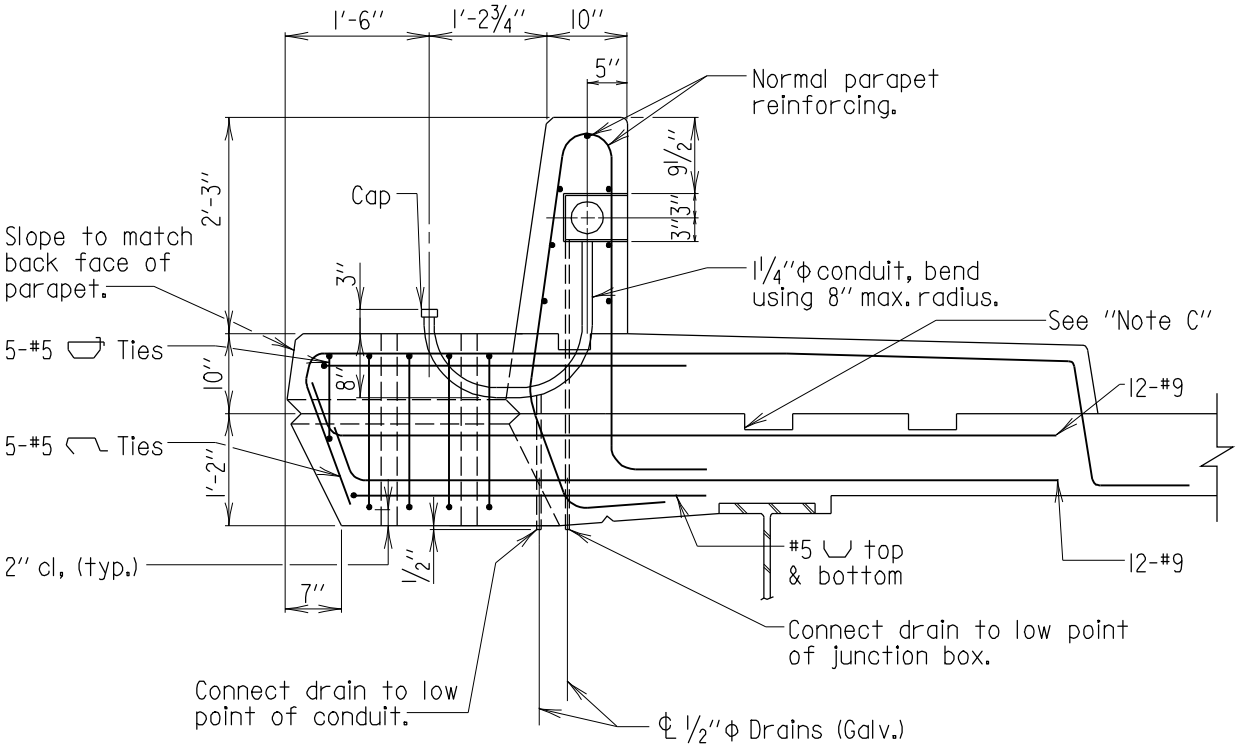
VERIFIED 10-9-2007 LRFD

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH SINGLE CONDUIT AND PARAPET WITH DIAMOND BACK AND SIDEWALK

STANDARD NO. BR-SS(6.53)-05-355(L) SHEET 1 OF 2

SUPER-CONCRETE WORK

Note:
Conduit, drain tubes and cap
may be galvanized steel or PVC.



SECTION B-B FOR SIDEWALKS WITH PARAPET

Scale: ½"=1'-0"

Note:
All longitudinal bars are #5's and shall be placed continuously in the sidewalk from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multispan bridge. Refer to BR-SS(6.26)-03-161.

Note C:
The constr. jt. between the sidewalk and the deck slab may vary slightly from the joint indicated.
For exact details and location of the joint see "Superstructure" Sheet.

SIDEWALK WITH DIAMOND BACK

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
·	·
·	·
·	·
·	·

FHWA APPROVAL
DATE: 3-19-85

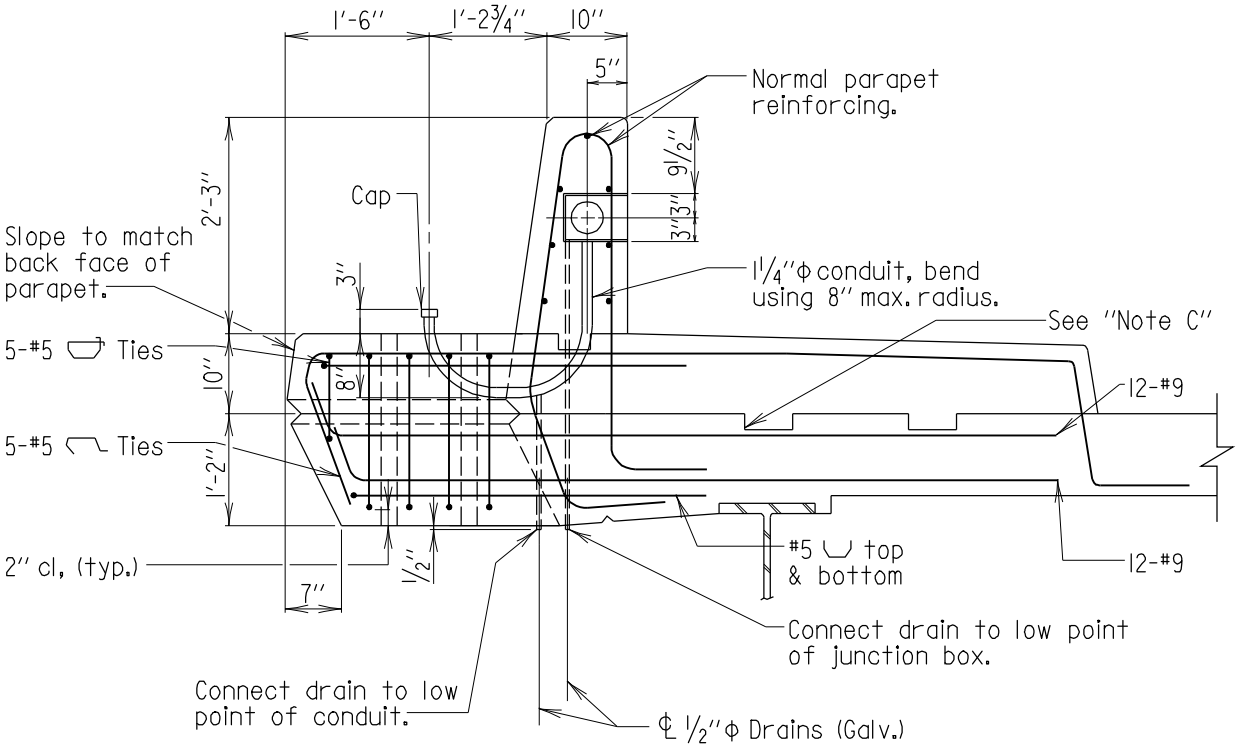
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

SUPPORT BRACKET FOR MOUNTED LIGHT POST
WITH SINGLE CONDUIT AND PARAPET
WITH DIAMOND BACK AND SIDEWALK

STANDARD NO. BR-SS(6.53)-05-355 SHEET 2 OF 2

SUPER-CONCRETE WORK

Note:
Conduit, drain tubes and cap
may be galvanized steel or PVC.



SECTION B-B FOR SIDEWALKS WITH PARAPET

Scale: ½"=1'-0"

Note:
All longitudinal bars are #5's and shall be placed continuously in the sidewalk from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multispan bridge. Refer to BR-SS(6.26)-03-161.

Note C:
The constr. jt. between the sidewalk and the deck slab may vary slightly from the joint indicated.
For exact details and location of the joint see "Superstructure" Sheet.

SIDEWALK WITH DIAMOND BACK

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
10-9-07	·
·	·
·	·
·	·

FHWA APPROVAL
DATE: 3-19-85

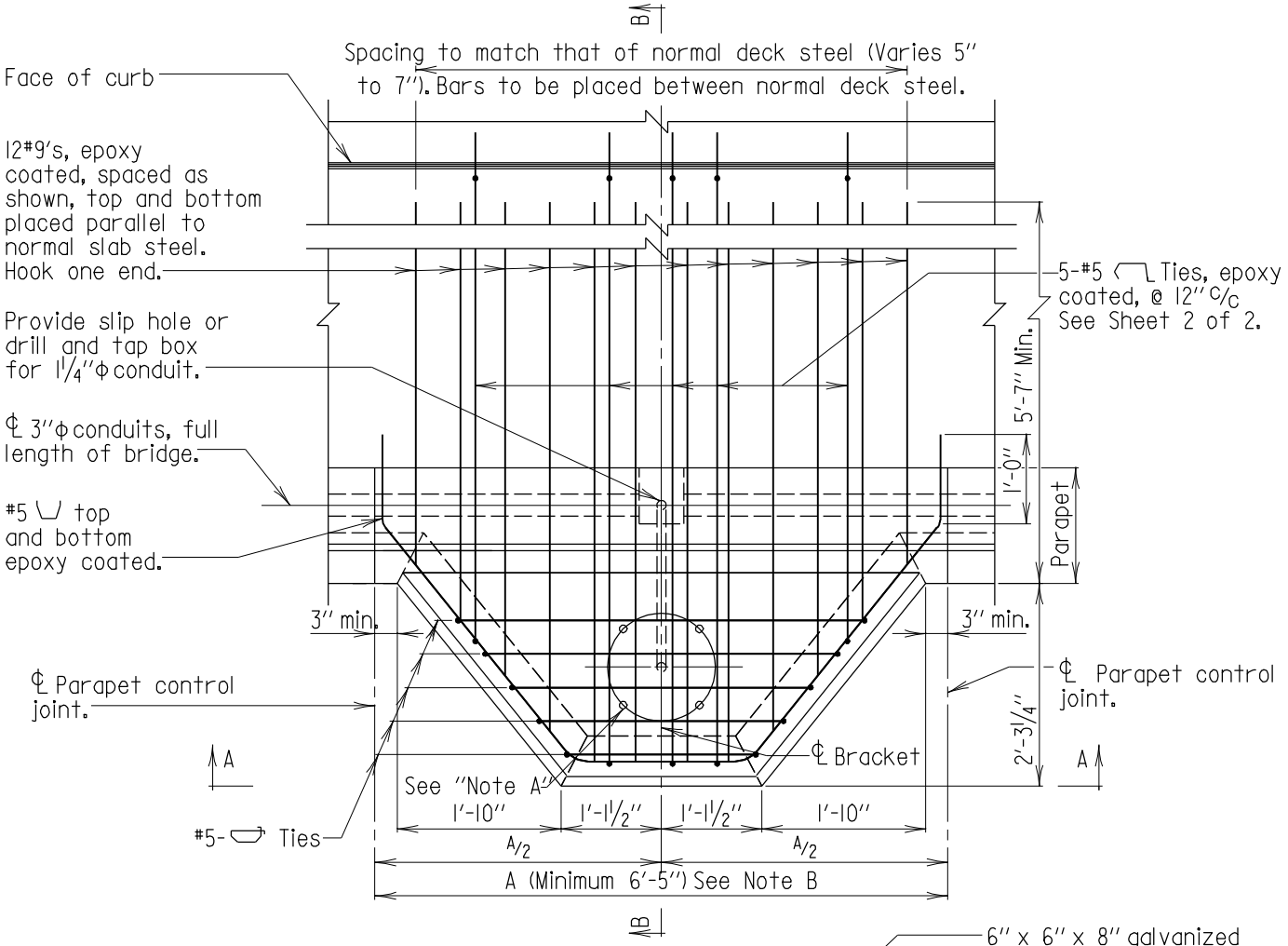
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

VERIFIED 10-9-2007 LRFD

SUPPORT BRACKET FOR MOUNTED LIGHT POST
WITH SINGLE CONDUIT AND PARAPET
WITH DIAMOND BACK AND SIDEWALK

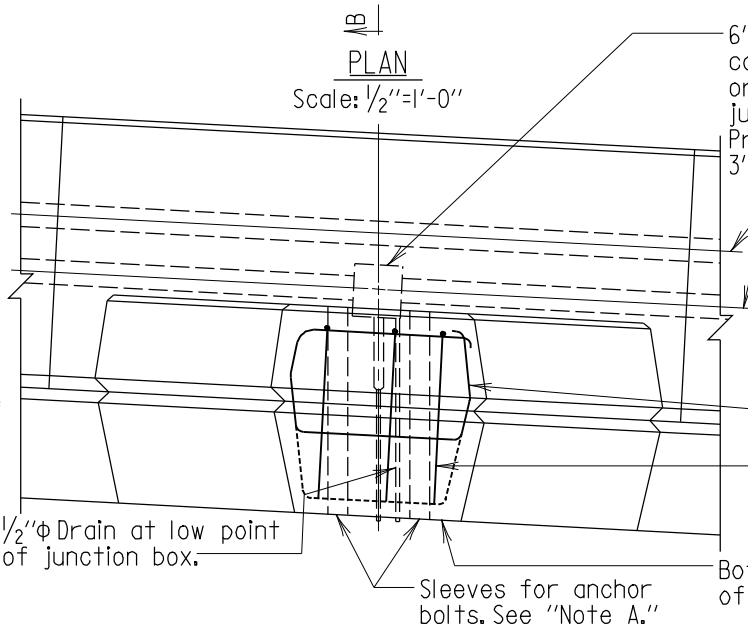
STANDARD NO. BR-SS(6.53)-05-355(L) SHEET 2 OF 2

SUPER-CONCRETE WORK



PLAN

Scale: 1/2"=1'-0"



SECTION A-A

Scale: 1/2"=1'-0"

For Section "B-B" see Sheet 2 of 2.

Note B:
Station for light post support bracket shown on Plans is only approximate. ℄ Bracket to be located midway between parapet control joints.
A= Normal parapet contol joint spacing (Adjust as necessary to meet minimum limitations).
If a light post is placed at ℄ of pier, eliminate the control joint at the ℄ of pier, The first control joint beyond, on one side only shall be changed to a paraffin joint.

Note:
Normal slab reinforcing steel not shown.

Note A:
Contractor is to contact the District Engineer in writing prior to placing sleeves for anchor bolts, to ascertain the bolt circle dimension and size of anchor bolts that will be used on this project. All light poles to be set plumb using leveling nuts on anchor bolts. Max. height of pole for this detail is 40'.

SIDEWALK WITH DIAMOND BACK

APPROVAL
E S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
1-9-08	·
·	·
·	·
·	·

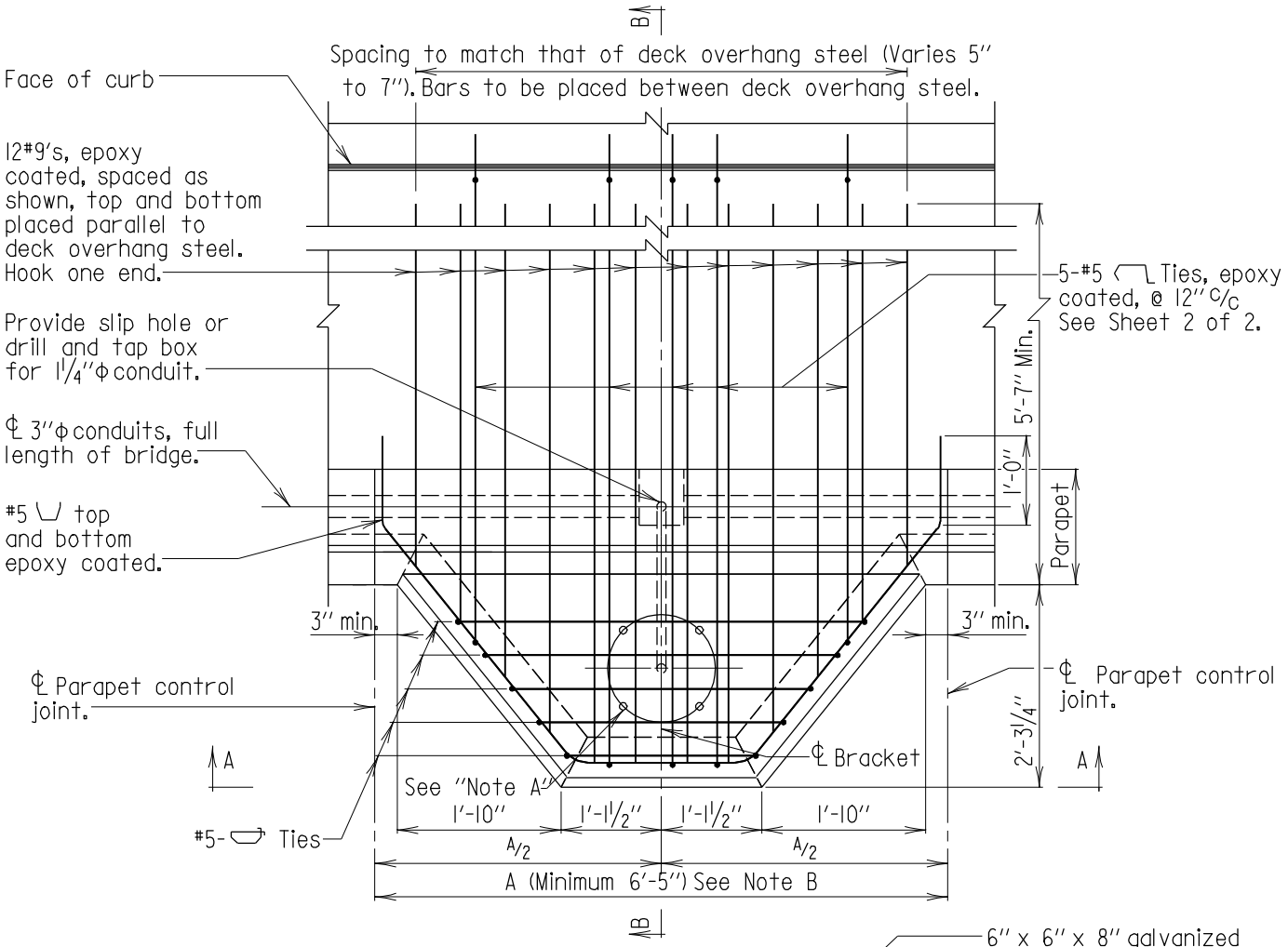
FHWA APPROVAL
DATE: .

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH DUAL CONDUITS AND PARAPET WITH DIAMOND BACK AND SIDEWALK

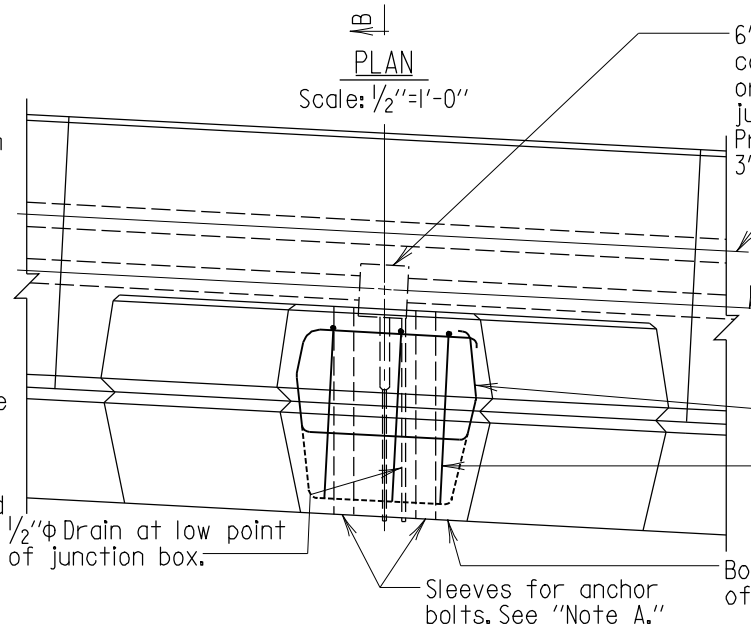
STANDARD NO. BR-SS(6.54)-05-356 SHEET 1 OF 2

SUPER-CONCRETE WORK



PLAN

Scale: 1/2"=1'-0"



SECTION A-A

Scale: 1/2"=1'-0"

For Section "B-B" see Sheet 2 of 2.

Note B:
Station for light post support bracket shown on Plans is only approximate. ℄ Bracket to be located midway between parapet control joints.
A= Normal parapet contol joint spacing (Adjust as necessary to meet minimum limitations).
If a light post is placed at ℄ of pier, eliminate the control joint at the ℄ of pier, The first control joint beyond, on one side only shall be changed to a paraffin joint.

Note:
Deck overhang reinforcing steel not shown.

Note A:
Contractor is to contact the District Engineer in writing prior to placing sleeves for anchor bolts, to ascertain the bolt circle dimension and size of anchor bolts that will be used on this project. All light poles to be set plumb using leveling nuts on anchor bolts. Max. height of pole for this detail is 40'.

SIDEWALK WITH DIAMOND BACK

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
10-9-07	·
1-9-08	·
·	·
·	·

FHWA APPROVAL
DATE: .

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

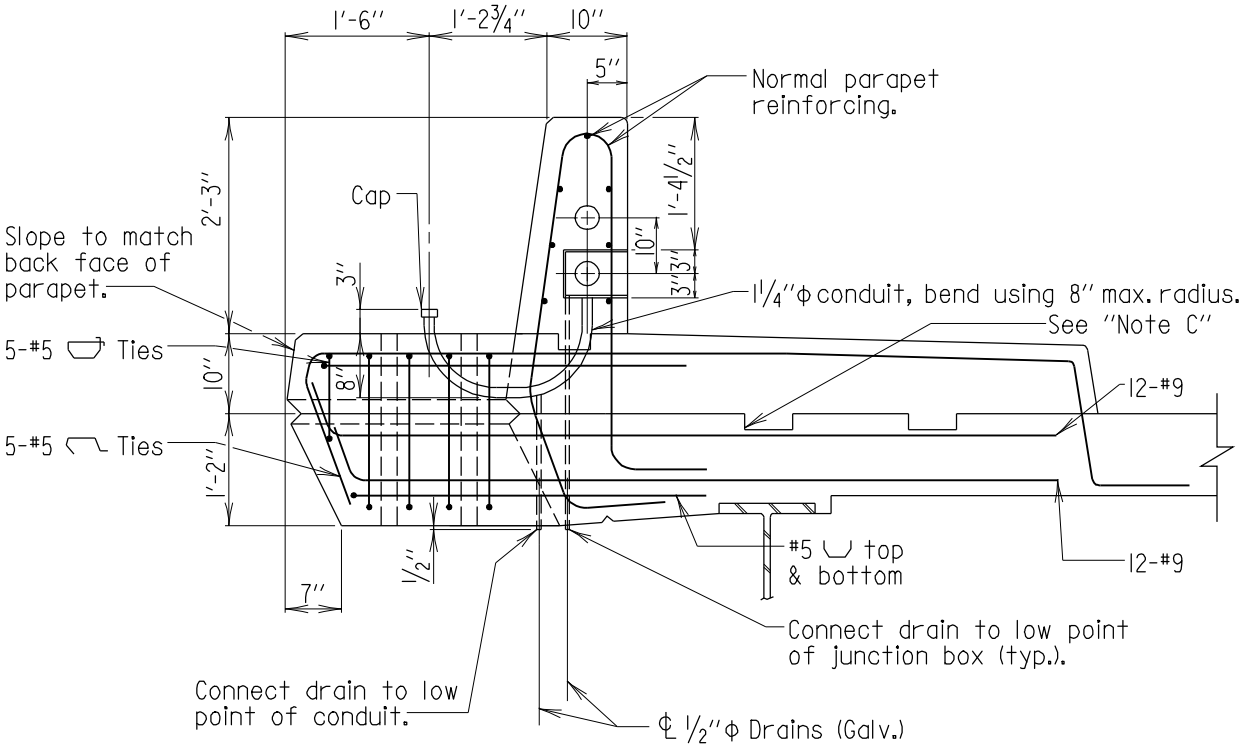
VERIFIED 10-9-2007 LRFD

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH DUAL CONDUITS AND PARAPET WITH DIAMOND BACK AND SIDEWALK

STANDARD NO. BR-SS(6.54)-05-356(L) SHEET 1 OF 2

SUPER-CONCRETE WORK

Note:
Conduit, drain tubes and cap
may be galvanized steel or PVC.



SECTION B-B FOR SIDEWALKS WITH PARAPET

Scale: ½"=1'-0"

Note:
All longitudinal bars are #5's and shall be placed continuously in the sidewalk from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multispan bridge. Refer to BR-SS(6.26)-03-161.

Note C:
The constr. jt. between the sidewalk and the deck slab may vary slightly from the joint indicated.
For exact details and location of the joint see "Superstructure" Sheet.

SIDEWALK WITH DIAMOND BACK

APPROVAL
E S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
.	.
.	.
.	.
.	.

FHWA APPROVAL
DATE: .

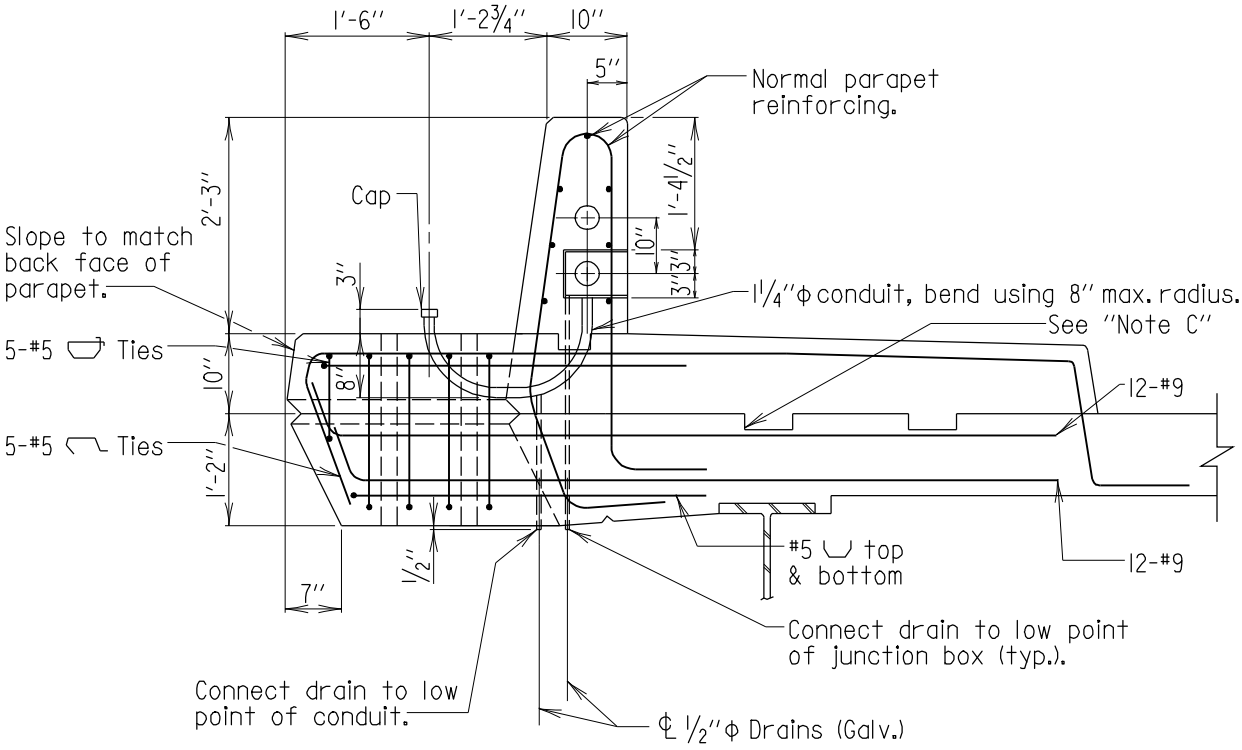
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

SUPPORT BRACKET FOR MOUNTED LIGHT POST
WITH DUAL CONDUITS AND PARAPET
WITH DIAMOND BACK AND SIDEWALK

STANDARD NO. BR-SS(6.54)-05-356 SHEET 2 OF 2

SUPER-CONCRETE WORK

Note:
Conduit, drain tubes and cap
may be galvanized steel or PVC.



SECTION B-B FOR SIDEWALKS WITH PARAPET

Scale: ½"=1'-0"

Note:
All longitudinal bars are #5's and shall be placed continuously in the sidewalk from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multispan bridge. Refer to BR-SS(6.26)-03-161.

Note C:
The constr. jt. between the sidewalk and the deck slab may vary slightly from the joint indicated.
For exact details and location of the joint see "Superstructure" Sheet.

SIDEWALK WITH DIAMOND BACK

APPROVAL
E S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
10-9-07	·
·	·
·	·
·	·

FHWA APPROVAL
DATE: ·

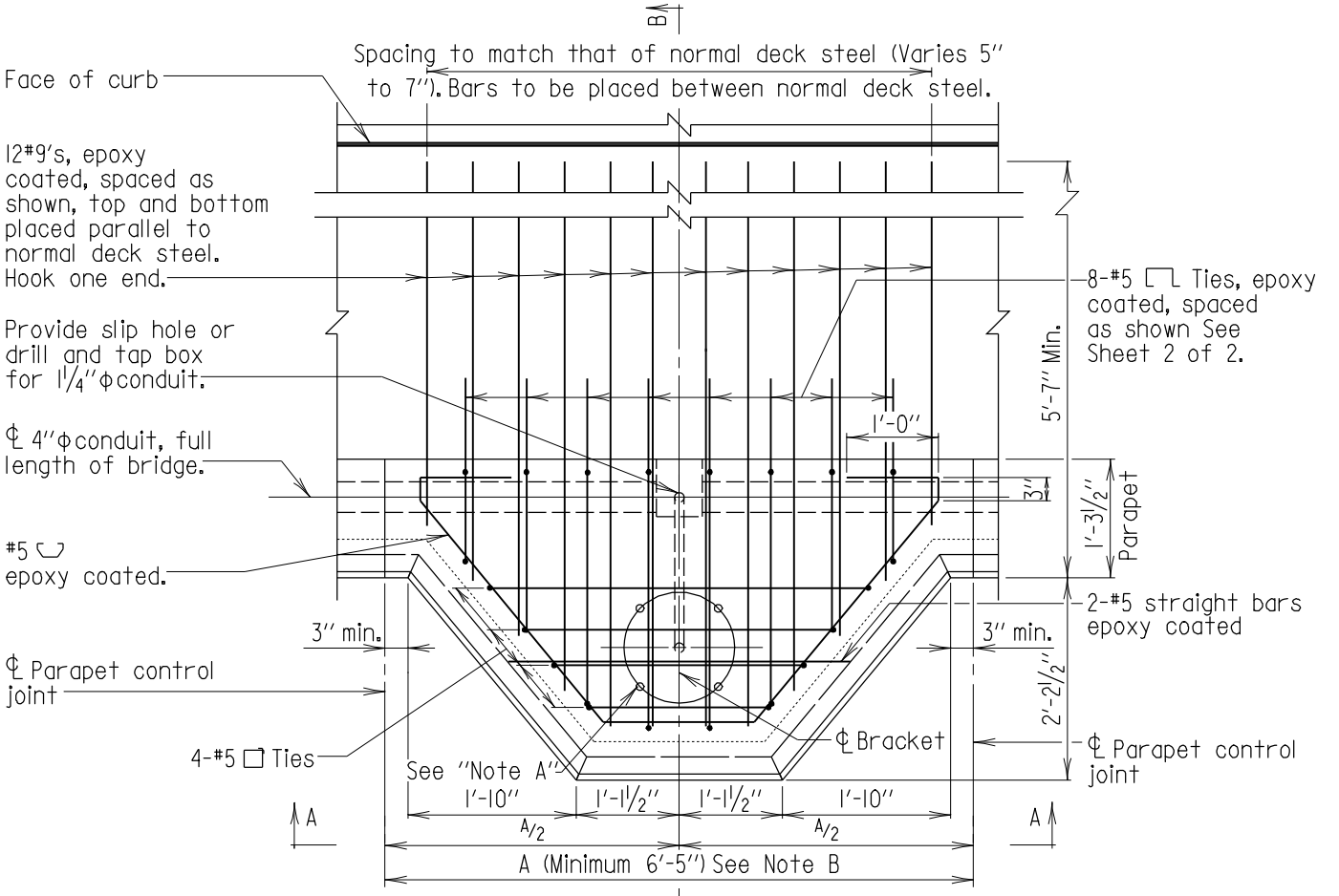
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

VERIFIED 10-9-2007 LRFD

SUPPORT BRACKET FOR MOUNTED LIGHT POST
WITH DUAL CONDUITS AND PARAPET
WITH DIAMOND BACK AND SIDEWALK

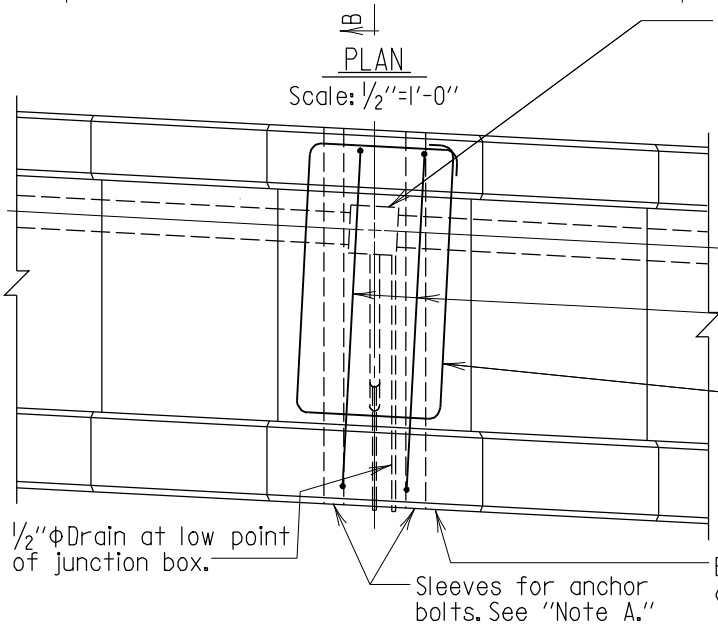
STANDARD NO. BR-SS(6.54)-05-356(L) SHEET 2 OF 2

SUPER-CONCRETE WORK



PLAN

Scale: 1/2"=1'-0"



SECTION A-A

Scale: 1/2"=1'-0"

Note B:
Station for light post support bracket shown on Plans is only approximate. ℄ Bracket to be located midway between parapet control joints.
A = Normal parapet control joint spacing (adjust as necessary to meet minimum limitations).
If a light post is placed at ℄ of pier, eliminate the control joint at the ℄ of pier, The first control joint beyond, on one side only shall be changed to a paraffin joint.

Note:
Normal deck reinforcing steel not shown.

Note A:
Contractor is to contact the District Engineer in writing prior to placing sleeves for anchor bolts, to ascertain the bolt circle dimension and size of anchor bolts that will be used on this project. All light poles to be set plumb using leveling nuts on anchor bolts. Max. height of pole for this detail is 40'.

For Section "B-B" see Sheet 2 of 2.

RECESSED BACK WITH SIDEWALK

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
1-9-08	·
·	·
·	·
·	·

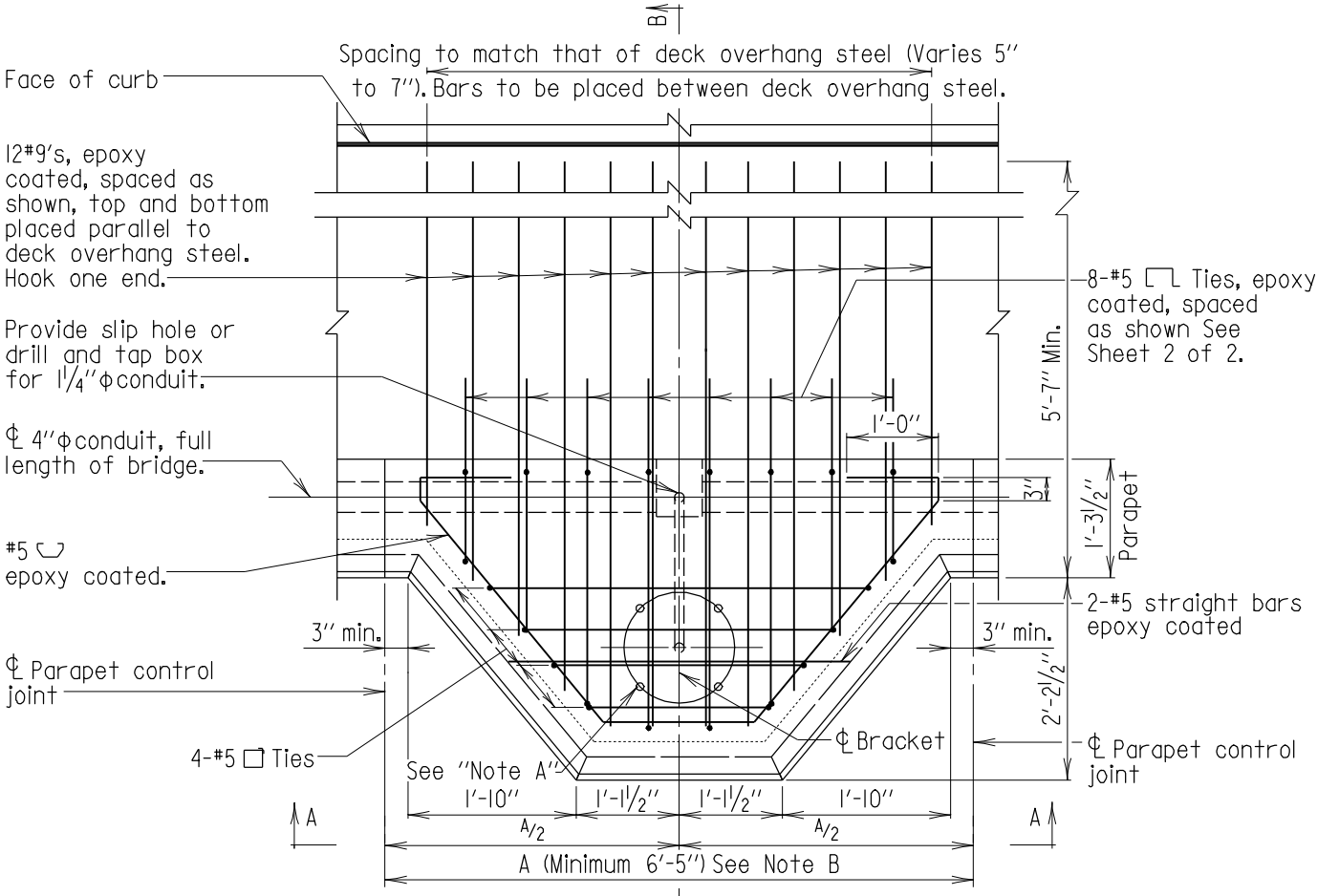
FHWA APPROVAL
DATE: .

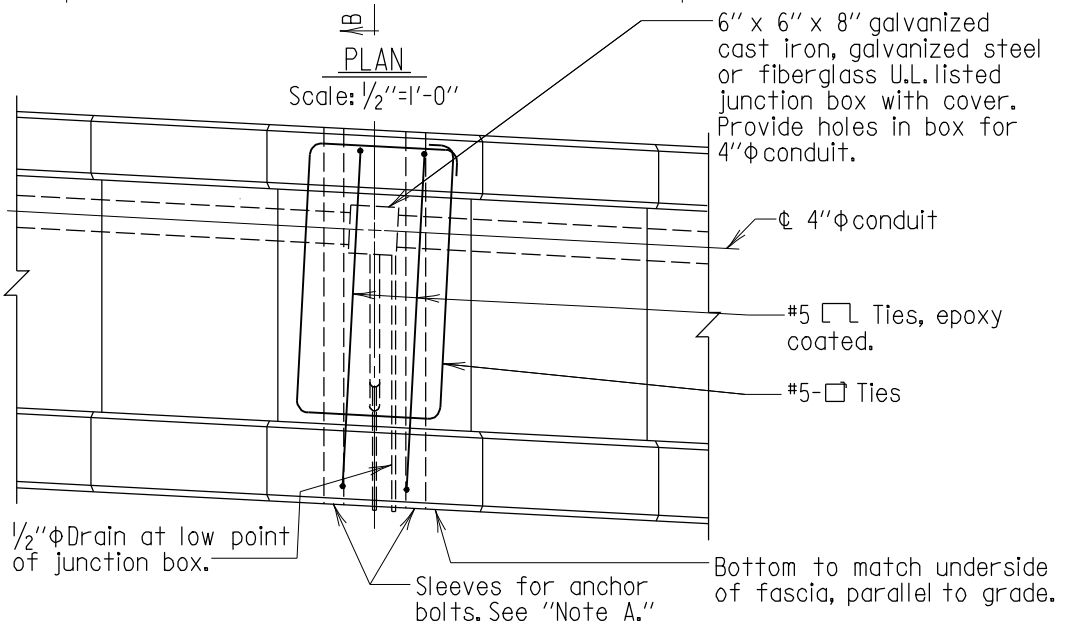
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH SINGLE CONDUIT AND PARAPET WITH ARCHITECTURAL FINISH AND SIDEWALK

STANDARD NO. BR-SS(6.55)-05-357 SHEET 1 OF 2

SUPER-CONCRETE WORK





Note B:
Station for light post support bracket shown on Plans is only approximate. ℄ Bracket to be located midway between parapet control joints.
A = Normal parapet control joint spacing (adjust as necessary to meet minimum limitations).
If a light post is placed at ℄ of pier, eliminate the control joint at the ℄ of pier, The first control joint beyond, on one side only shall be changed to a paraffin joint.

SECTION A-A
Scale: 1/2"=1'-0"

For Section "B-B" see Sheet 2 of 2.

Note:
Deck overhang reinforcing steel not shown.

Note A:
Contractor is to contact the District Engineer in writing prior to placing sleeves for anchor bolts, to ascertain the bolt circle dimension and size of anchor bolts that will be used on this project. All light poles to be set plumb using leveling nuts on anchor bolts. Max. height of pole for this detail is 40'.

RECESSED BACK WITH SIDEWALK

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
10-9-07	·
1-9-08	·
·	·
·	·

FHWA APPROVAL
DATE: .

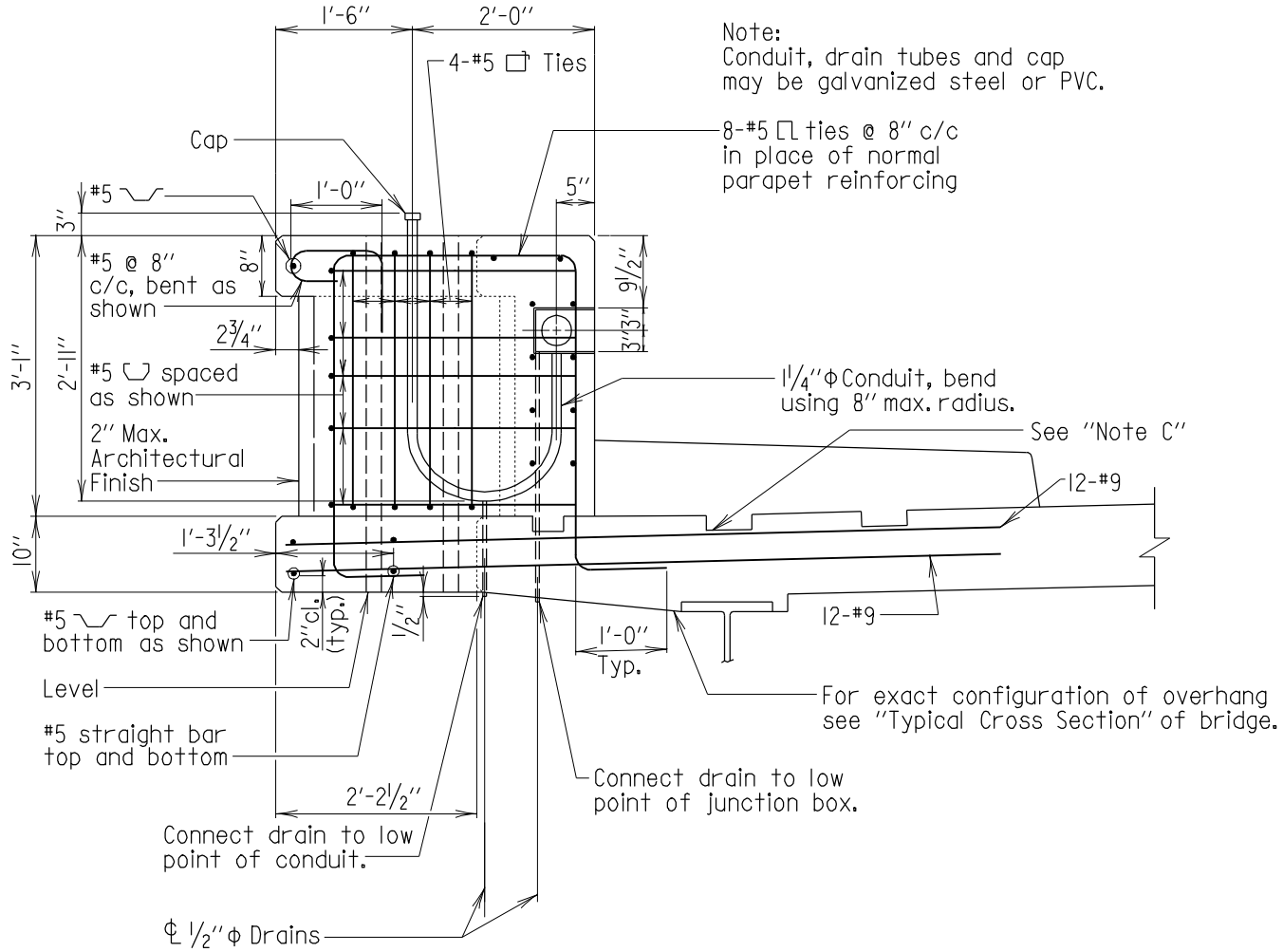
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

VERIFIED 10-9-2007 LRFD

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH SINGLE CONDUIT AND PARAPET WITH ARCHITECTURAL FINISH AND SIDEWALK

STANDARD NO. BR-SS(6.55)-05-357(L) SHEET 1 OF 2

SUPER-CONCRETE WORK



SECTION B-B FOR SIDEWALKS WITH PARAPET

Scale: ½"=1'-0"

Note:
All longitudinal bars are #5's and shall be placed continuously in the sidewalk from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multispan bridge. Refer to BR-SS(6.48)-03-350.

Note C:
The constr. jt. between the sidewalk and the deck may vary slightly from the joint indicated.
For exact details and location of the joint see "Superstructure" Sheet.

RECESSED BACK WITH SIDEWALK

APPROVAL
C S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA

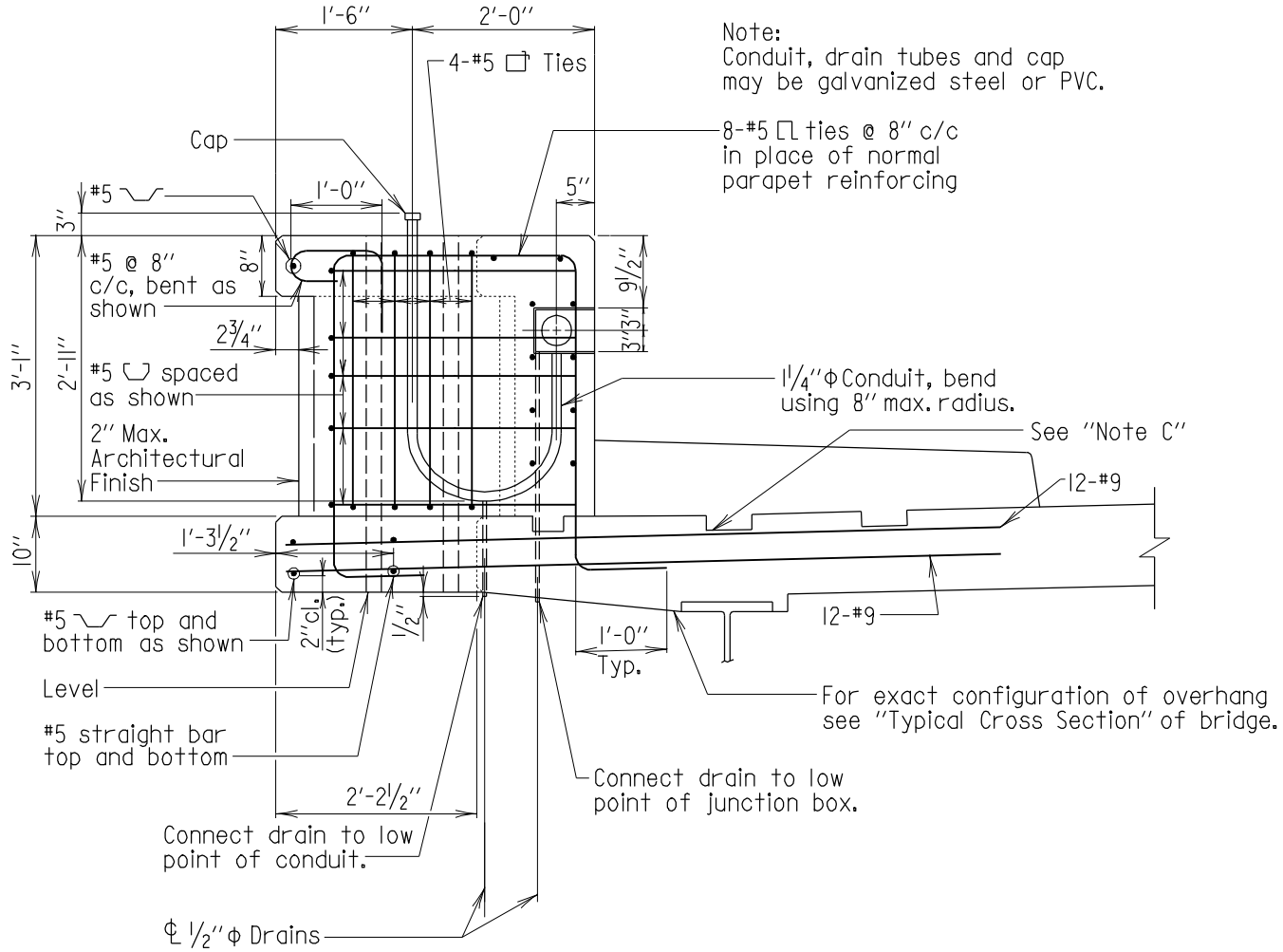
FHWA APPROVAL
DATE:

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH SINGLE CONDUIT AND PARAPET WITH ARCHITECTURAL FINISH AND SIDEWALK

STANDARD NO. BR-SS(6.55)-05-357 SHEET 2 OF 2

SUPER-CONCRETE WORK



SECTION B-B FOR SIDEWALKS WITH PARAPET

Scale: 1/2"=1'-0"

Note:
All longitudinal bars are #5's and shall be placed continuously in the sidewalk from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multispan bridge. Refer to BR-SS(6.48)-03-350.

Note C:
The constr. jt. between the sidewalk and the deck may vary slightly from the joint indicated.
For exact details and location of the joint see "Superstructure" Sheet.

RECESSED BACK WITH SIDEWALK

APPROVAL
C.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
10-9-07	·
·	·
·	·
·	·

FHWA APPROVAL
DATE: ·

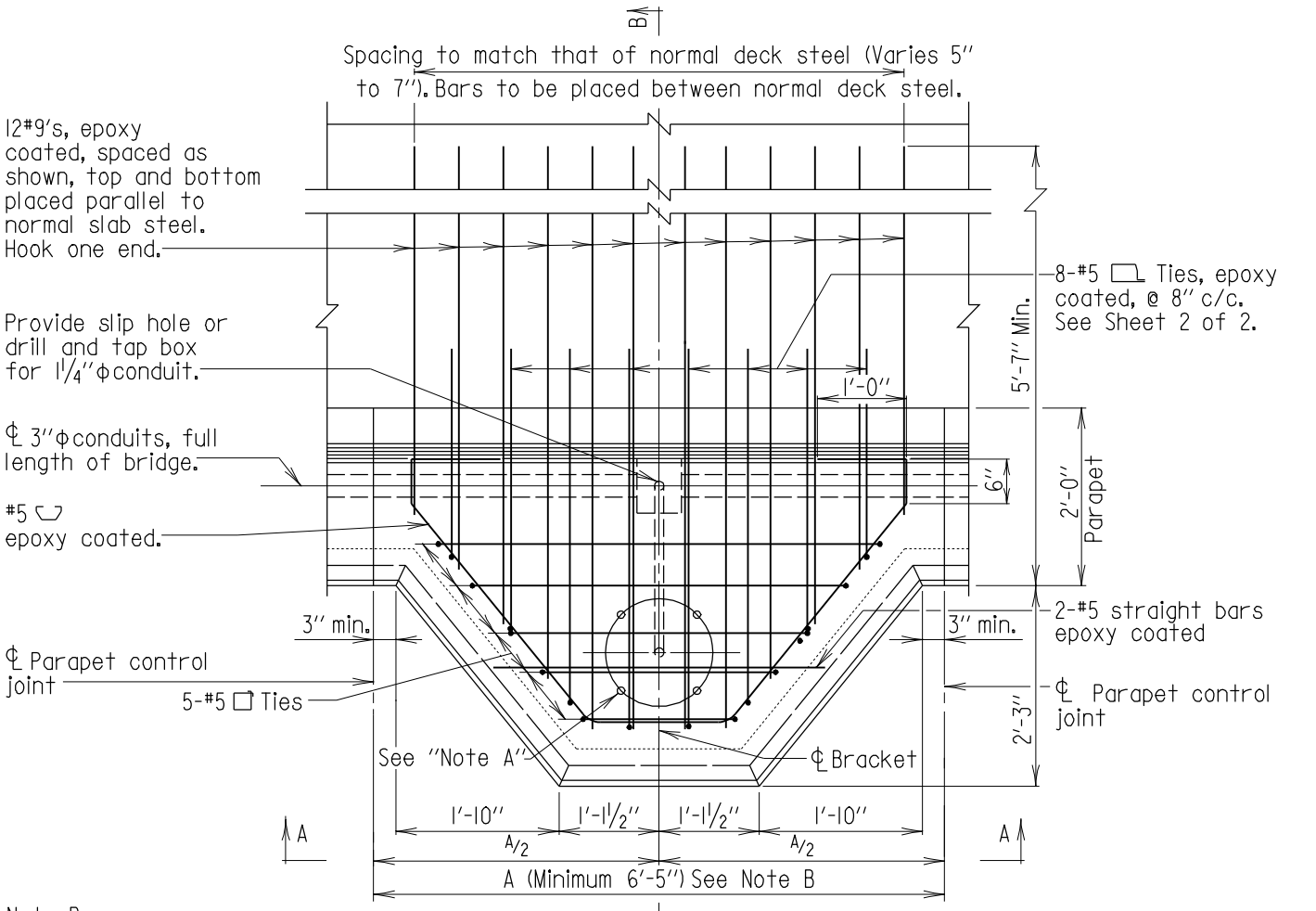
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

VERIFIED 10-9-2007 LRFD

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH SINGLE CONDUIT AND PARAPET WITH ARCHITECTURAL FINISH AND SIDEWALK

STANDARD NO. BR-SS(6.55)-05-357(L) SHEET 2 OF 2

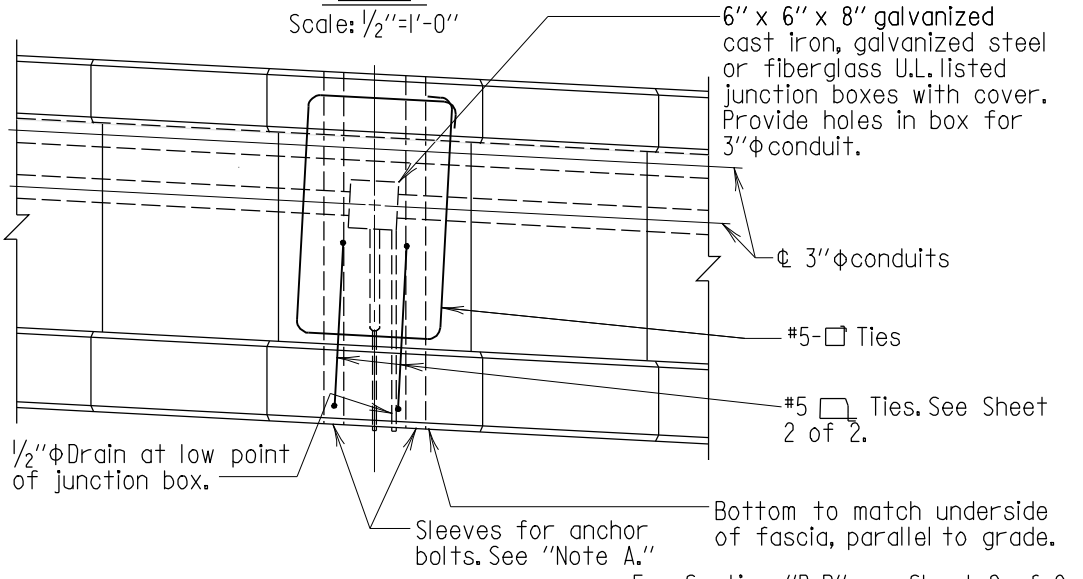
SUPER-CONCRETE WORK



PLAN

Scale: 1/2"=1'-0"

Note B:
Station for light post support bracket shown on Plans is only approximate. ℄ Bracket to be located midway between parapet control joints.
A = Normal parapet control joint spacing (adjust as necessary to meet minimum limitations).
If a light post is placed at ℄ of pier, eliminate the control joint at the ℄ of pier, The first control joint beyond, on one side only shall be changed to a paraffin joint.



For Section "B-B" see Sheet 2 of 2.

Note:
Normal slab reinforcing steel not shown.

Note A:
Contractor is to contact the District Engineer in writing prior to placing sleeves for anchor bolts, to ascertain the bolt circle dimension and size of anchor bolts that will be used on this project. All light poles to be set plumb using leveling nuts on anchor bolts. Max. height of pole for this detail is 40'.

SECTION A-A

Scale: 1/2"=1'-0"

34" RECESSED BACK

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
1-9-08	·
·	·
·	·
·	·

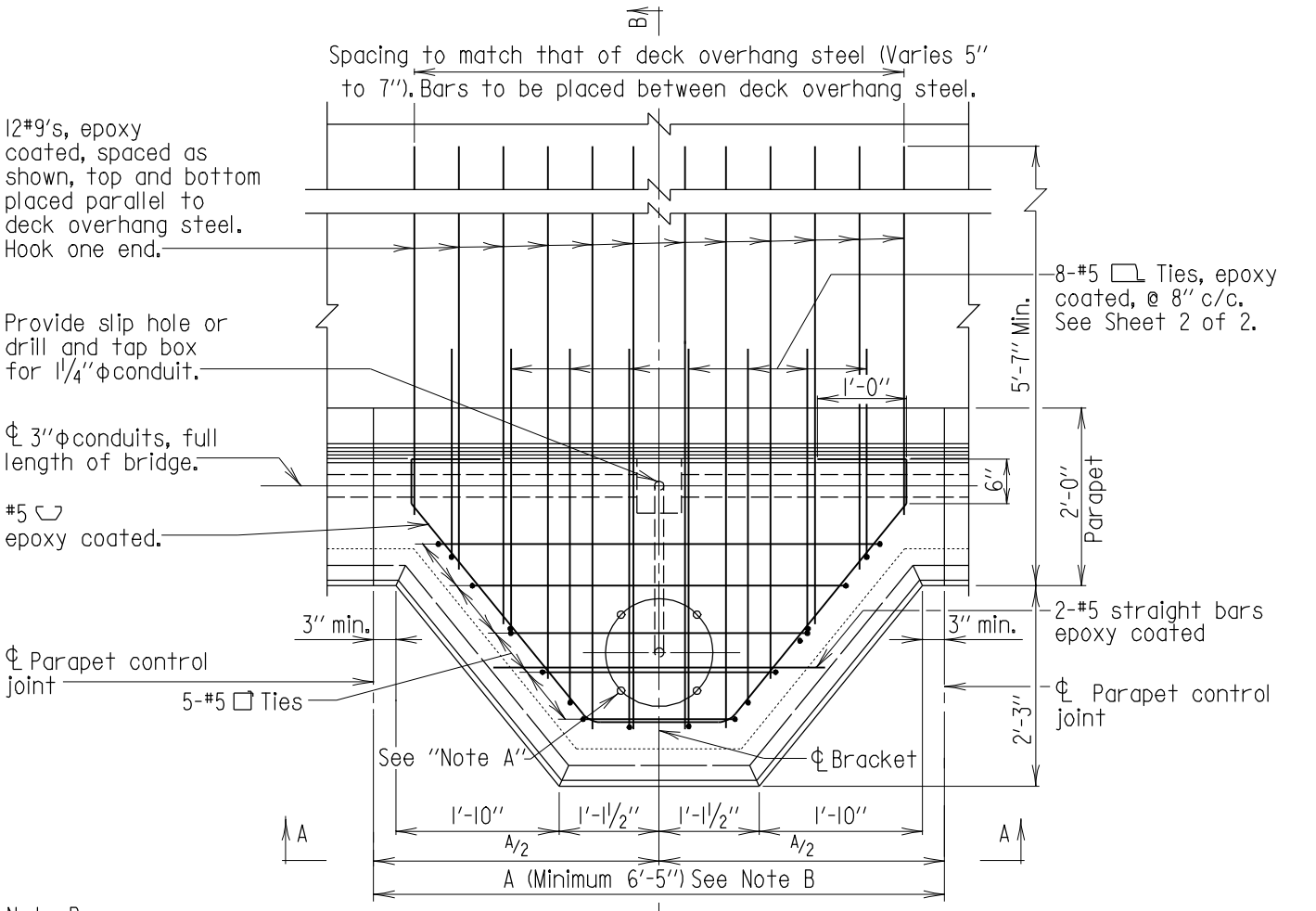
FHWA APPROVAL
DATE: ·

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH DUAL CONDUITS AND 34" F-SHAPE PARAPET WITH ARCHITECTURAL FINISH

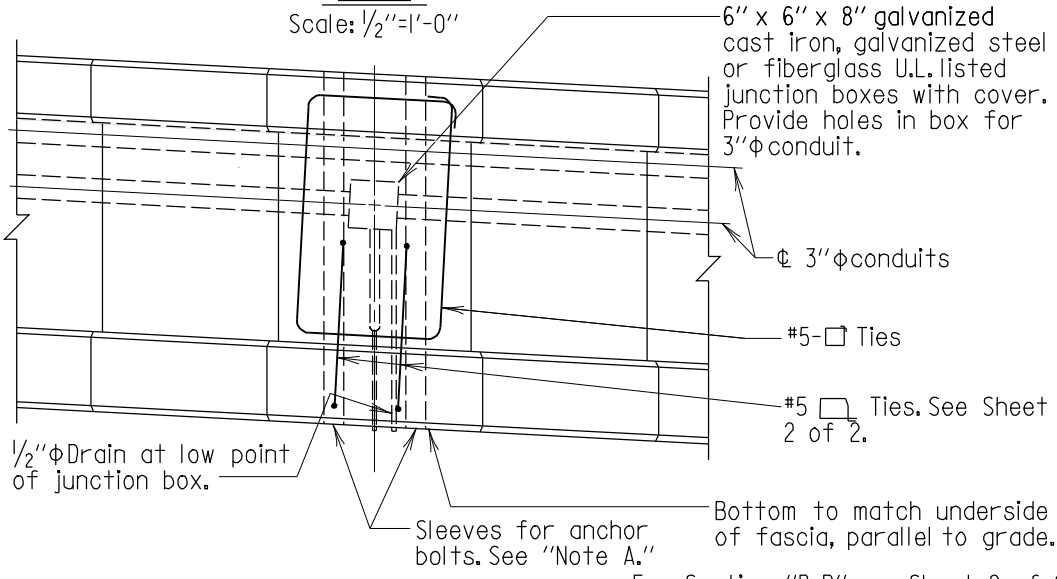
STANDARD NO. BR-SS(6.56)-05-358A SHEET 1 OF 2

SUPER-CONCRETE WORK



PLAN

Scale: ½"=1'-0"



For Section "B-B" see Sheet 2 of 2.

SECTION A-A

Scale: ½"=1'-0"

Note B:
Station for light post support bracket shown on Plans is only approximate. ℄ Bracket to be located midway between parapet control joints.
A = Normal parapet control joint spacing (adjust as necessary to meet minimum limitations).
If a light post is placed at ℄ of pier, eliminate the control joint at the ℄ of pier, The first control joint beyond, on one side only shall be changed to a paraffin joint.

Note:
Deck overhang reinforcing steel not shown.

Note A:
Contractor is to contact the District Engineer in writing prior to placing sleeves for anchor bolts, to ascertain the bolt circle dimension and size of anchor bolts that will be used on this project. All light poles to be set plumb using leveling nuts on anchor bolts. Max. height of pole for this detail is 40'.

34'' RECESSED BACK

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
10-9-07	·
1-9-08	·
·	·
·	·

FHWA APPROVAL		
DATE: .	·	·

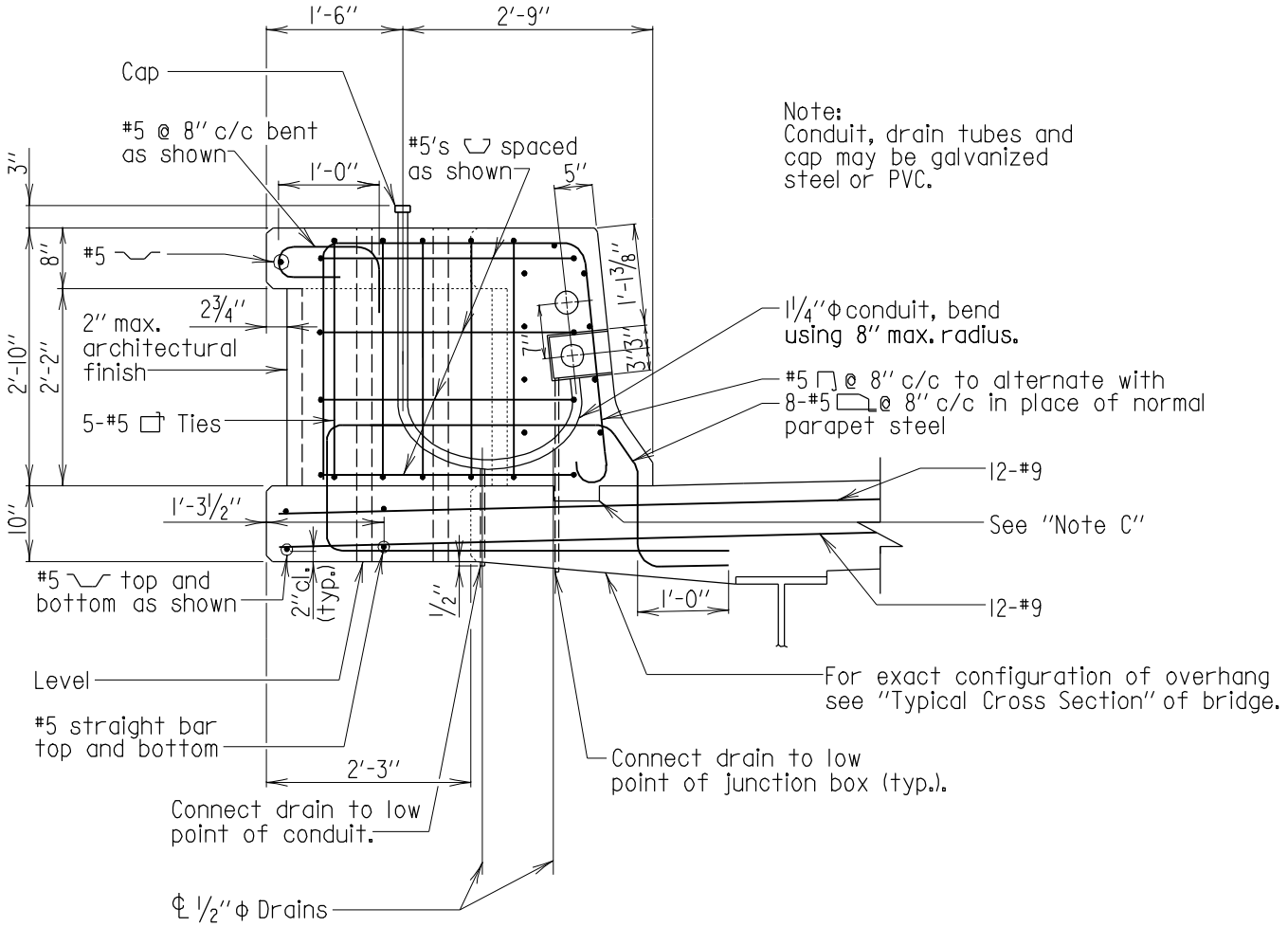
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

VERIFIED 10-9-2007 LRFD

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH DUAL CONDUITS AND 34" F-SHAPE PARAPET WITH ARCHITECTURAL FINISH

STANDARD NO. BR-SS(6.56)-05-358A(L) SHEET 1 OF 2

SUPER-CONCRETE WORK



SECTION B-B FOR 34" F-SHAPE BARRIER

Scale: ½"=1'-0"

Note:
All longitudinal bars are #5's and shall be placed continuously in the parapet from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multispan bridge. Refer to BR-SS(6.47)-03-349A.

Note C:
The constr. jt. between the F-shape parapet and the deck slab may vary slightly from the joint indicated. For exact details and location of the joint see "Superstructure" Sheet.

34" RECESSED BACK

APPROVAL
E S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA

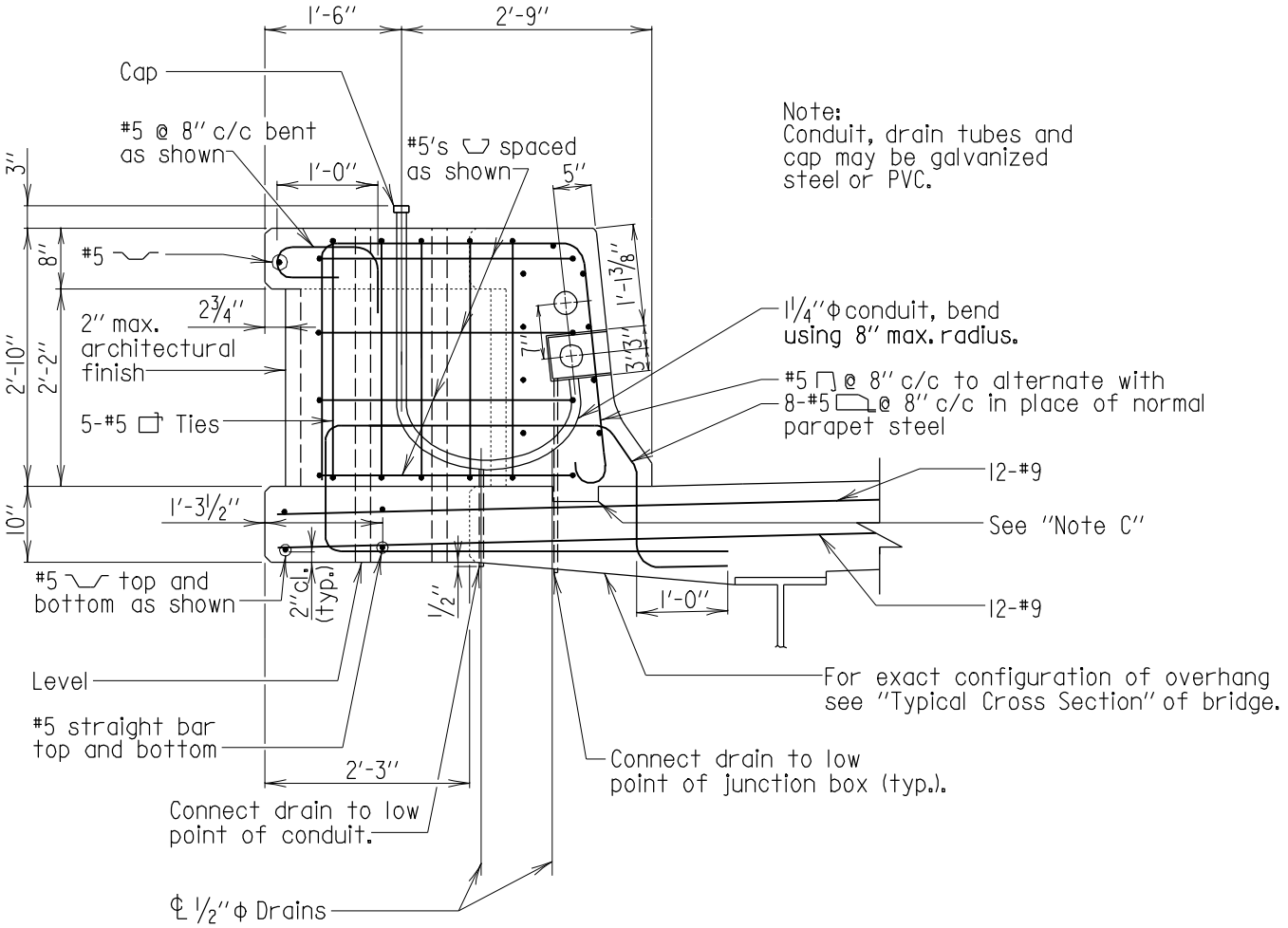
FHWA APPROVAL
DATE:

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH DUAL CONDUITS AND 34" F-SHAPE PARAPET WITH ARCHITECTURAL FINISH

STANDARD NO. BR-SS(6.56)-05-358A SHEET 2 OF 2

SUPER-CONCRETE WORK



SECTION B-B FOR 34" F-SHAPE BARRIER

Scale: ½"=1'-0"

Note:
All longitudinal bars are #5's and shall be placed continuously in the parapet from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multispan bridge. Refer to BR-SS(6.47)-03-349A.

Note C:
The constr. jt. between the F-shape parapet and the deck slab may vary slightly from the joint indicated. For exact details and location of the joint see "Superstructure" Sheet.

34" RECESSED BACK

APPROVAL
E S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
10-9-07	

FHWA APPROVAL
DATE:

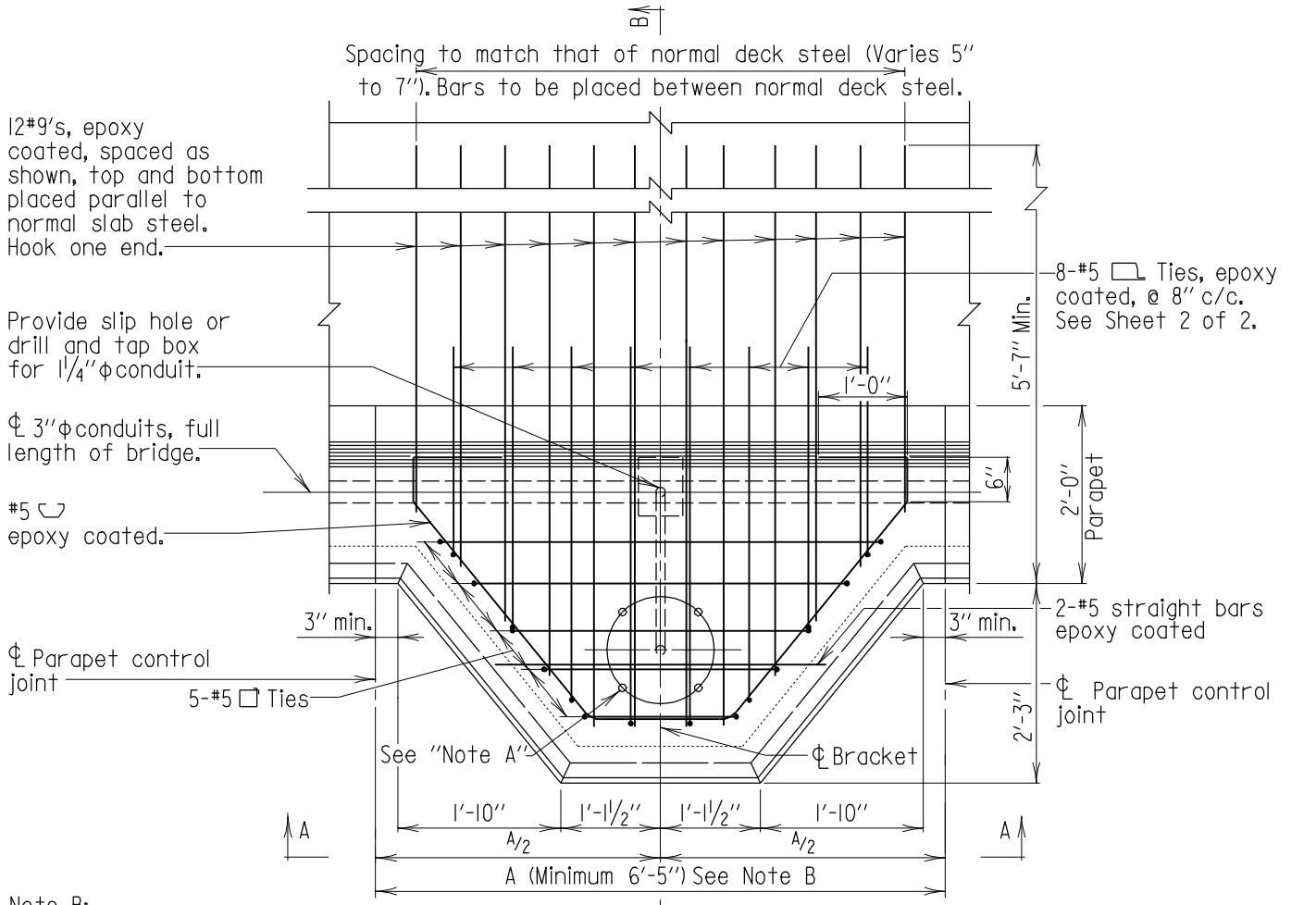
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

VERIFIED 10-9-2007 LRFD

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH DUAL CONDUITS AND 34" F-SHAPE PARAPET WITH ARCHITECTURAL FINISH

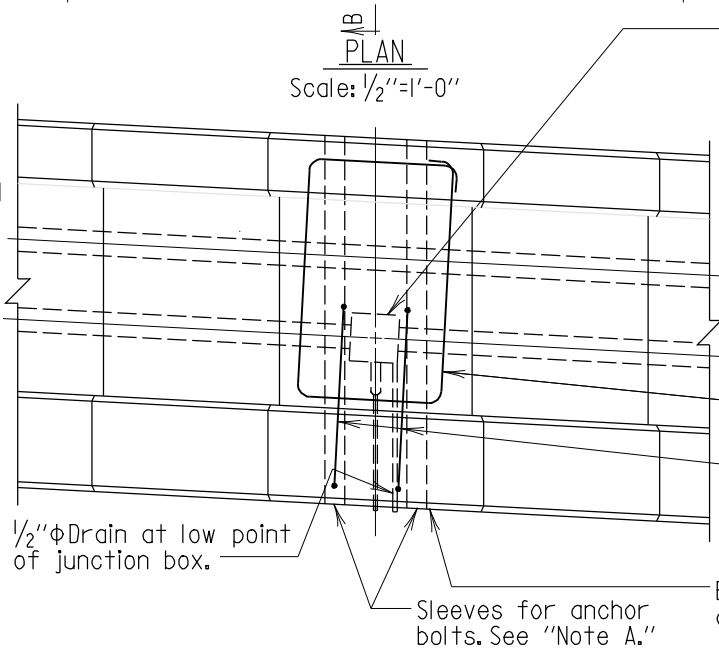
STANDARD NO. BR-SS(6.56)-05-358A(L) SHEET 2 OF 2

SUPER-CONCRETE WORK



PLAN

Scale: 1/2"=1'-0"



SECTION A-A

Scale: 1/2"=1'-0"

For Section "B-B" see Sheet 2 of 2.

Note B:
Station for light post support bracket shown on Plans is only approximate. ℄ Bracket to be located midway between parapet control joints.
A = Normal parapet control joint spacing (adjust as necessary to meet minimum limitations).
If a light post is placed at ℄ of pier, eliminate the control joint at the ℄ of pier, The first control joint beyond, on one side only shall be changed to a paraffin joint.

Note:
Normal slab reinforcing steel not shown.

Note A:
Contractor is to contact the District Engineer in writing prior to placing sleeves for anchor bolts, to ascertain the bolt circle dimension and size of anchor bolts that will be used on this project. All light poles to be set plumb using leveling nuts on anchor bolts. Max. height of pole for this detail is 40'.

42'' RECESSED BACK

APPROVAL
E S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
1-9-08	·
·	·
·	·
·	·

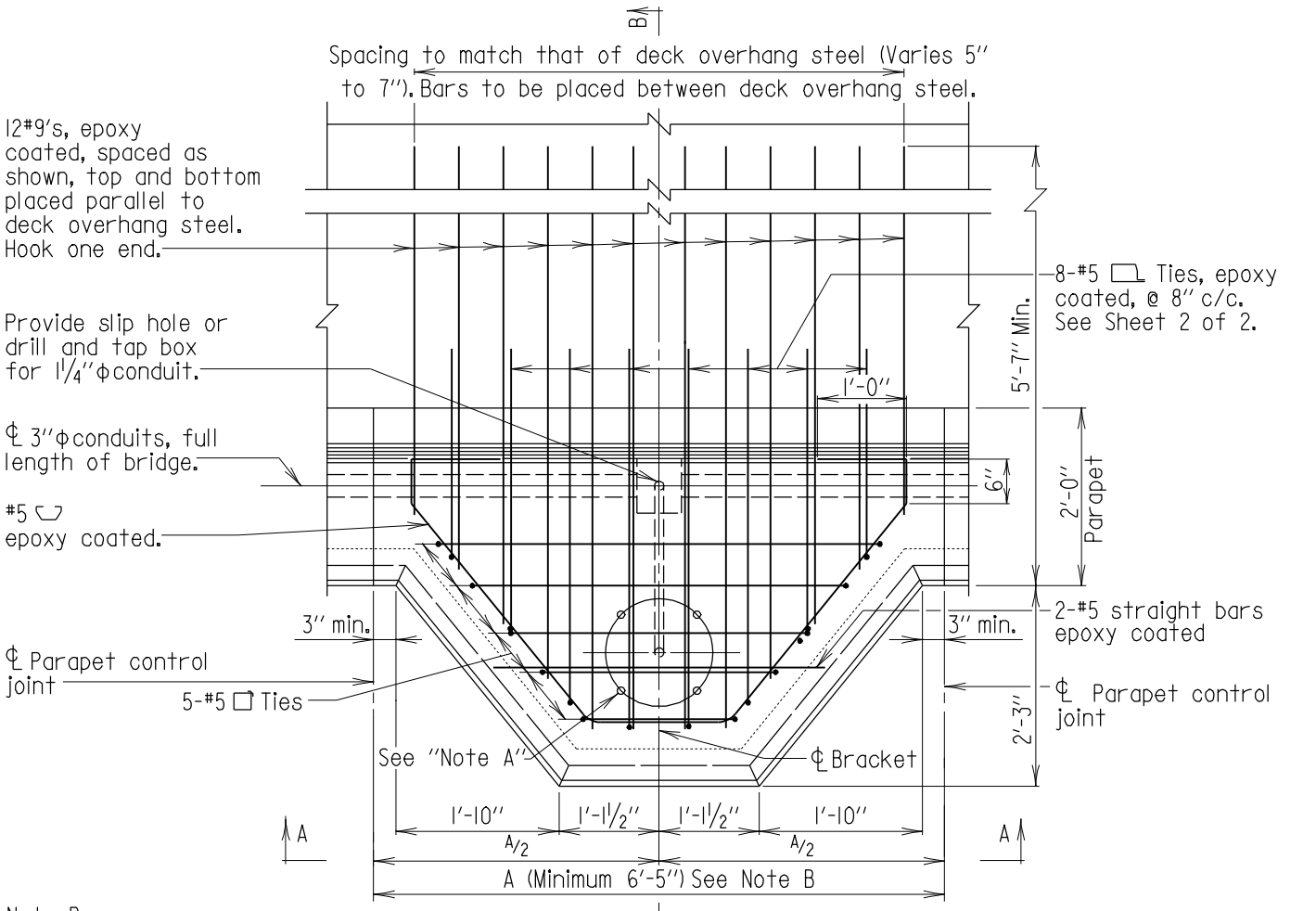
FHWA APPROVAL
DATE: .

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH DUAL CONDUITS AND 42" F-SHAPE PARAPET WITH ARCHITECTURAL FINISH

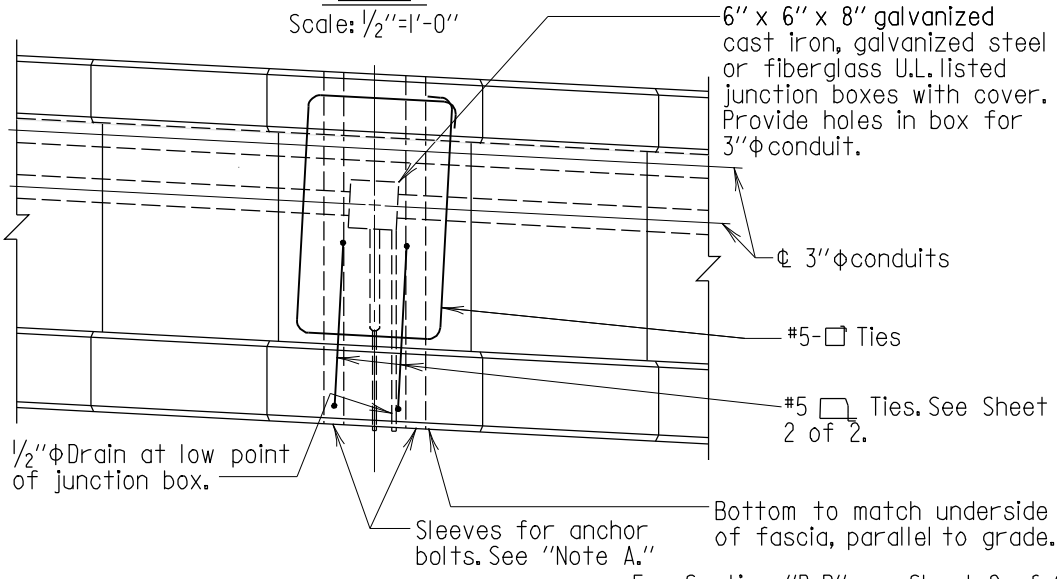
STANDARD NO. BR-SS(6.56)-05-358B SHEET 1 OF 2

SUPER-CONCRETE WORK



PLAN

Scale: ½"=1'-0"



For Section "B-B" see Sheet 2 of 2.

SECTION A-A

Scale: ½"=1'-0"

Note B:
Station for light post support bracket shown on Plans is only approximate. ℄ Bracket to be located midway between parapet control joints.
A = Normal parapet control joint spacing (adjust as necessary to meet minimum limitations).
If a light post is placed at ℄ of pier, eliminate the control joint at the ℄ of pier, The first control joint beyond, on one side only shall be changed to a paraffin joint.

Note:
Deck overhang reinforcing steel not shown.

Note A:
Contractor is to contact the District Engineer in writing prior to placing sleeves for anchor bolts, to ascertain the bolt circle dimension and size of anchor bolts that will be used on this project. All light poles to be set plumb using leveling nuts on anchor bolts. Max. height of pole for this detail is 40'.

34'' RECESSED BACK

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
10-9-07	·
1-9-08	·
·	·
·	·

FHWA APPROVAL		
DATE: .	·	·

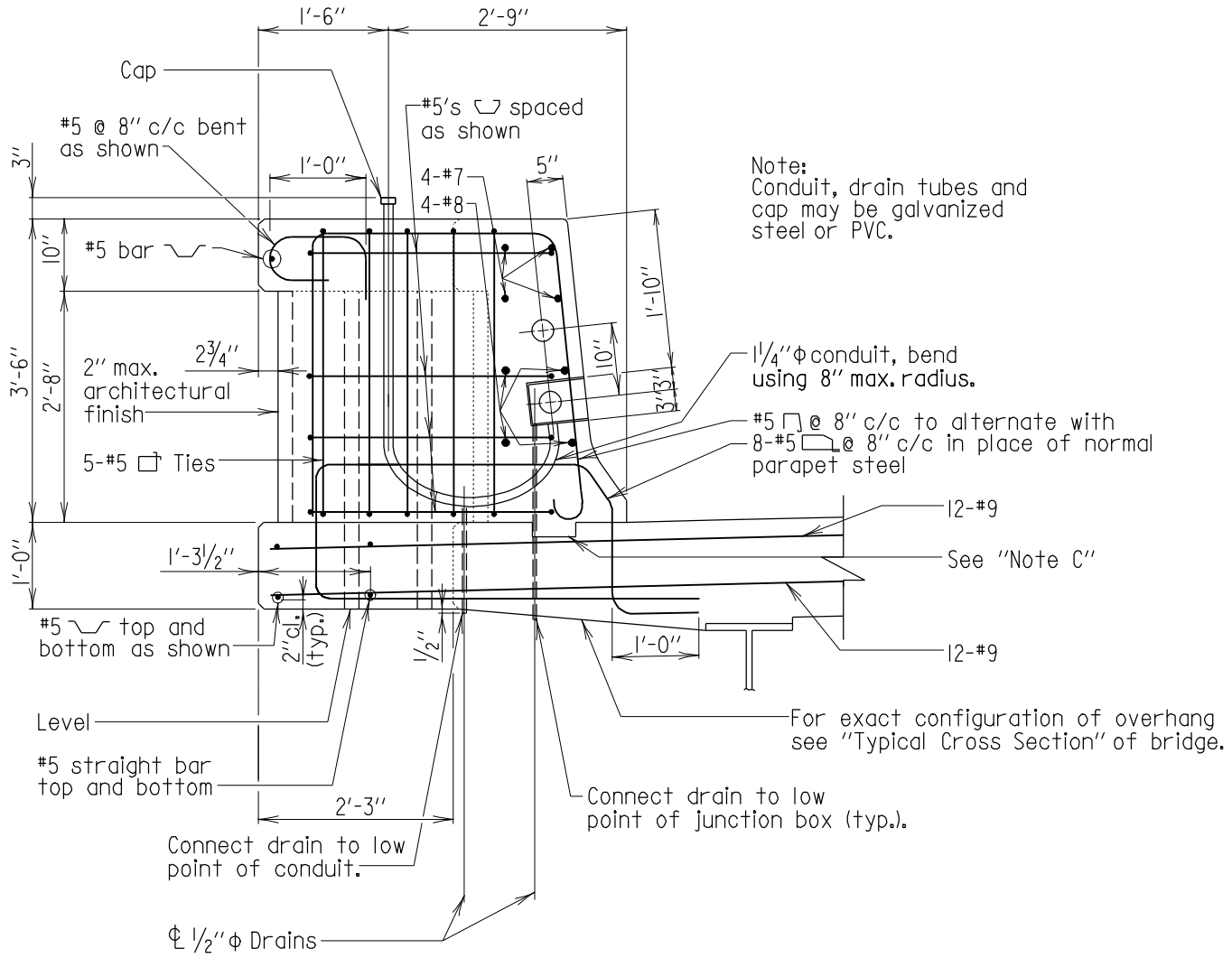
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

VERIFIED 10-9-2007 LRFD

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH DUAL CONDUITS AND 34" F-SHAPE PARAPET WITH ARCHITECTURAL FINISH

STANDARD NO. BR-SS(6.56)-05-358A(L) SHEET 1 OF 2

SUPER-CONCRETE WORK



SECTION B-B FOR 42" F-SHAPE BARRIER

Scale: 1/2"=1'-0"

Note:
All #7 and #8 bars shall be placed continuously in the parapet from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multispan bridge. Refer to BR-SS(6.47)-03-349B.

Note C:
The constr. jt. between the F-shape parapet and the deck slab may vary slightly from the joint indicated. For exact details and location of the joint see "Superstructure" Sheet.

42" RECESSED BACK

APPROVAL
DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA

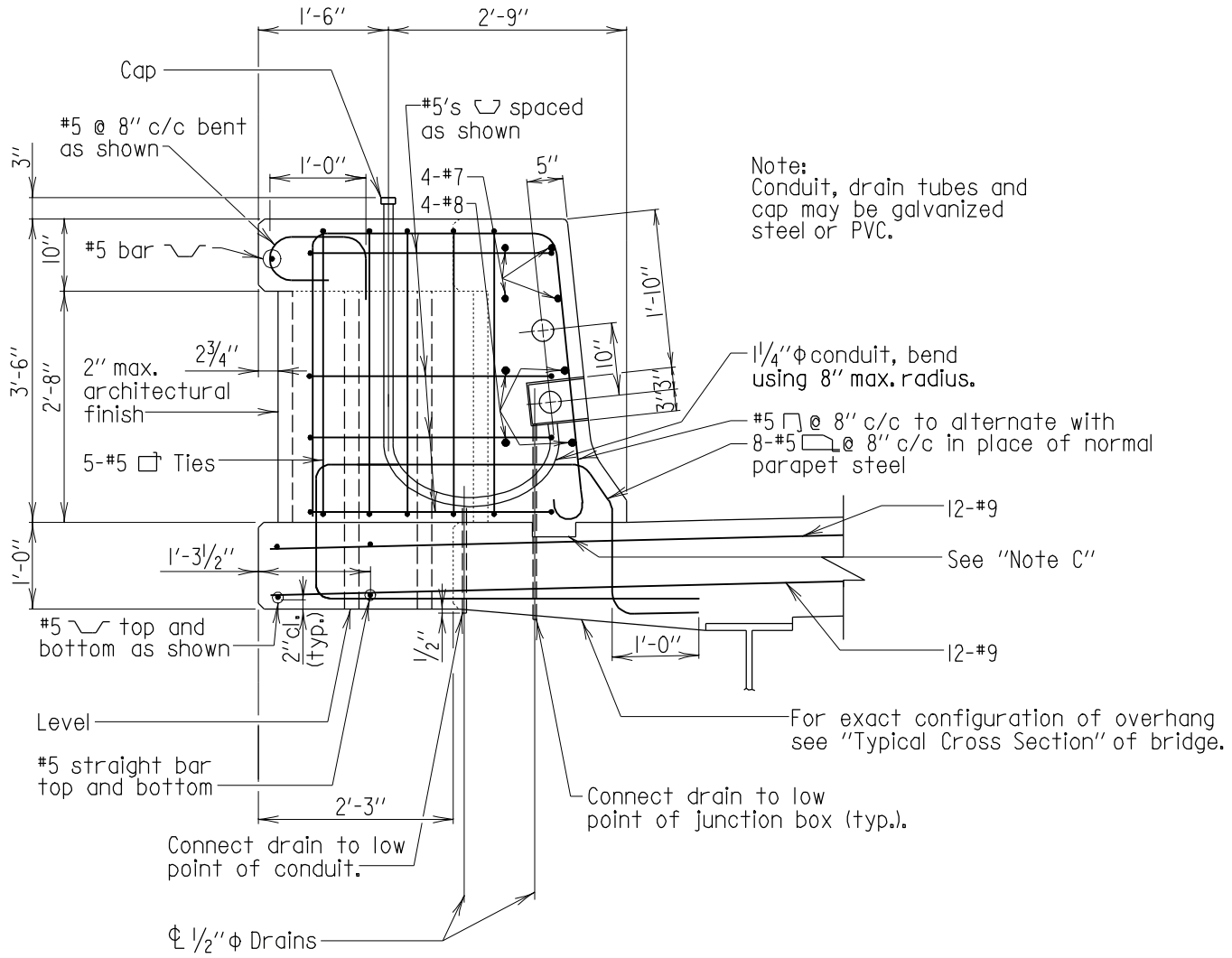
FHWA APPROVAL
DATE:

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH DUAL CONDUITS AND 42" F-SHAPE PARAPET WITH ARCHITECTURAL FINISH

STANDARD NO. BR-SS(6.56)-05-358B SHEET 2 OF 2

SUPER-CONCRETE WORK



SECTION B-B FOR 42" F-SHAPE BARRIER

Scale: 1/2"=1'-0"

Note:
All #7 and #8 bars shall be placed continuously in the parapet from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multispan bridge. Refer to BR-SS(6.47)-03-349B.

Note C:
The constr. jt. between the F-shape parapet and the deck slab may vary slightly from the joint indicated. For exact details and location of the joint see "Superstructure" Sheet.

42" RECESSED BACK

APPROVAL
C S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
10-9-07	

FHWA APPROVAL
DATE:

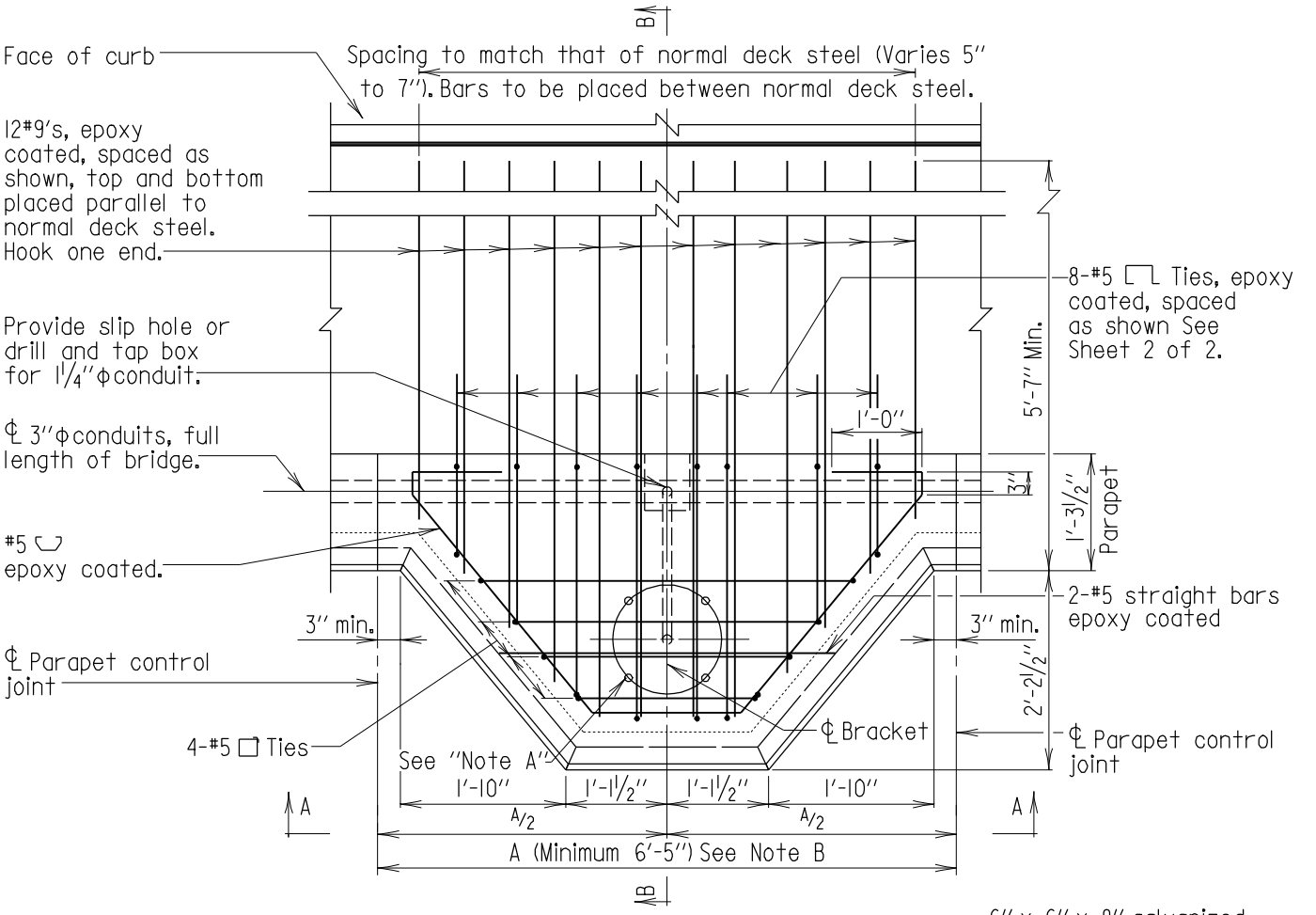
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

VERIFIED 10-9-2007 LRFD

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH DUAL CONDUITS AND 42" F-SHAPE PARAPET WITH ARCHITECTURAL FINISH

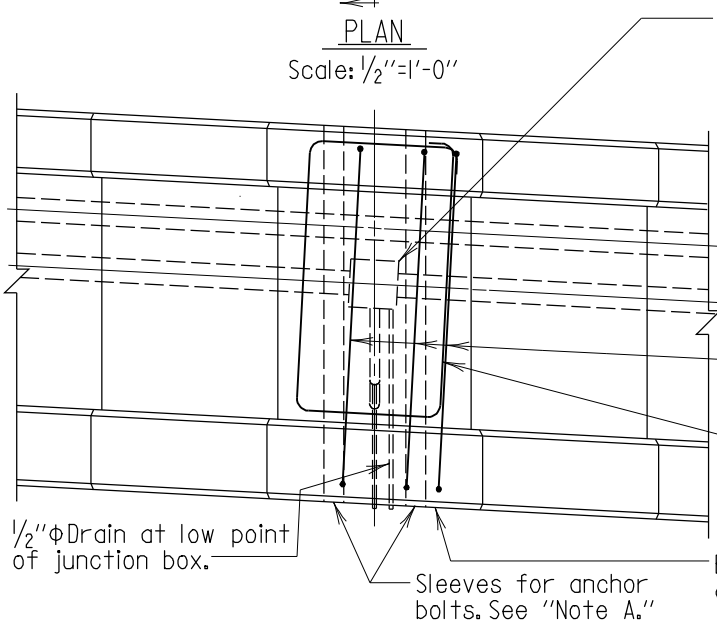
STANDARD NO. BR-SS(6.56)-05-358B(L) SHEET 2 OF 2

SUPER-CONCRETE WORK



PLAN

Scale: 1/2"=1'-0"



SECTION A-A

Scale: 1/2"=1'-0"

For Section "B-B" see Sheet 2 of 2.

Note B:
Station for light post support bracket shown on Plans is only approximate. ℄ Bracket to be located midway between parapet control joints.
A = Normal parapet control joint spacing (adjust as necessary to meet minimum limitations).
If a light post is placed at ℄ of pier, eliminate the control joint at the ℄ of pier, The first control joint beyond, on one side only shall be changed to a paraffin joint.

Note:
Normal deck reinforcing steel not shown.

Note A:
Contractor is to contact the District Engineer in writing prior to placing sleeves for anchor bolts, to ascertain the bolt circle dimension and size of anchor bolts that will be used on this project. All light poles to be set plumb using leveling nuts on anchor bolts. Max. height of pole for this detail is 40'.

RECESSED BACK WITH SIDEWALK

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
1-9-08	·
·	·
·	·
·	·

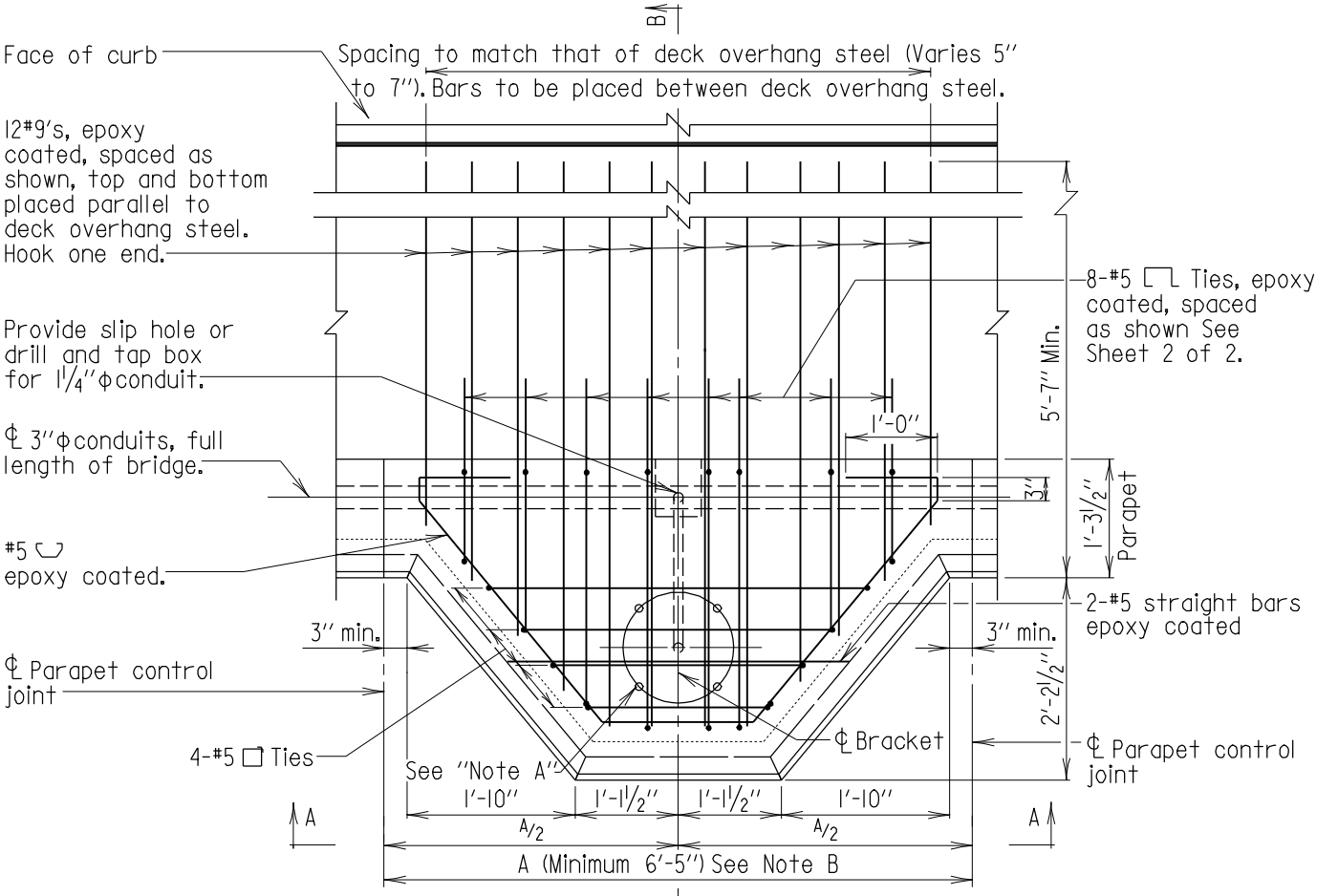
FHWA APPROVAL
DATE: ·

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH DUAL CONDUITS AND PARAPET WITH ARCHITECTURAL FINISH AND SIDEWALK

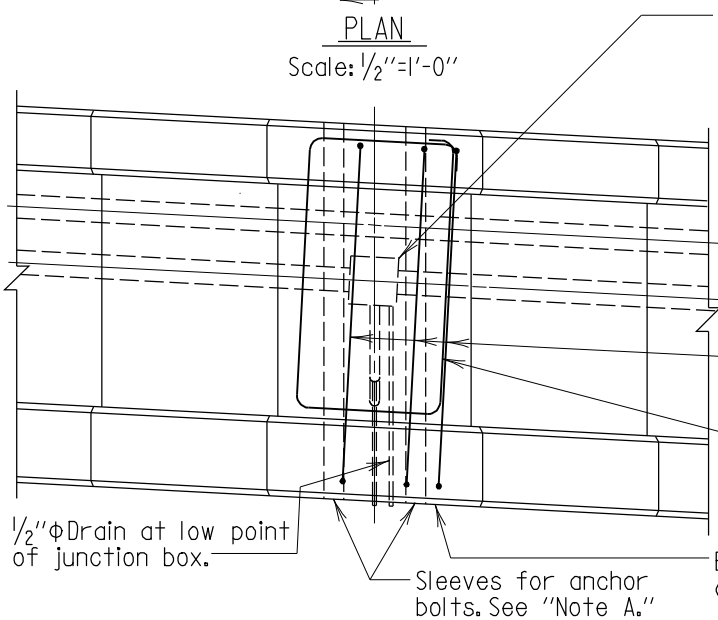
STANDARD NO. BR-SS(6.57)-05-359 SHEET 1 OF 2

SUPER-CONCRETE WORK



PLAN

Scale: 1/2"=1'-0"



SECTION A-A

Scale: 1/2"=1'-0"

For Section "B-B" see Sheet 2 of 2.

Note B:
Station for light post support bracket shown on Plans is only approximate. ℄ Bracket to be located midway between parapet control joints.
A = Normal parapet control joint spacing (adjust as necessary to meet minimum limitations).
If a light post is placed at ℄ of pier, eliminate the control joint at the ℄ of pier, The first control joint beyond, on one side only shall be changed to a paraffin joint.

Note:
Deck overhang reinforcing steel not shown.

Note A:
Contractor is to contact the District Engineer in writing prior to placing sleeves for anchor bolts, to ascertain the bolt circle dimension and size of anchor bolts that will be used on this project. All light poles to be set plumb using leveling nuts on anchor bolts. Max. height of pole for this detail is 40'.

RECESSED BACK WITH SIDEWALK

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
10-9-07	·
1-9-08	·
·	·
·	·

FHWA APPROVAL		
DATE:	·	·

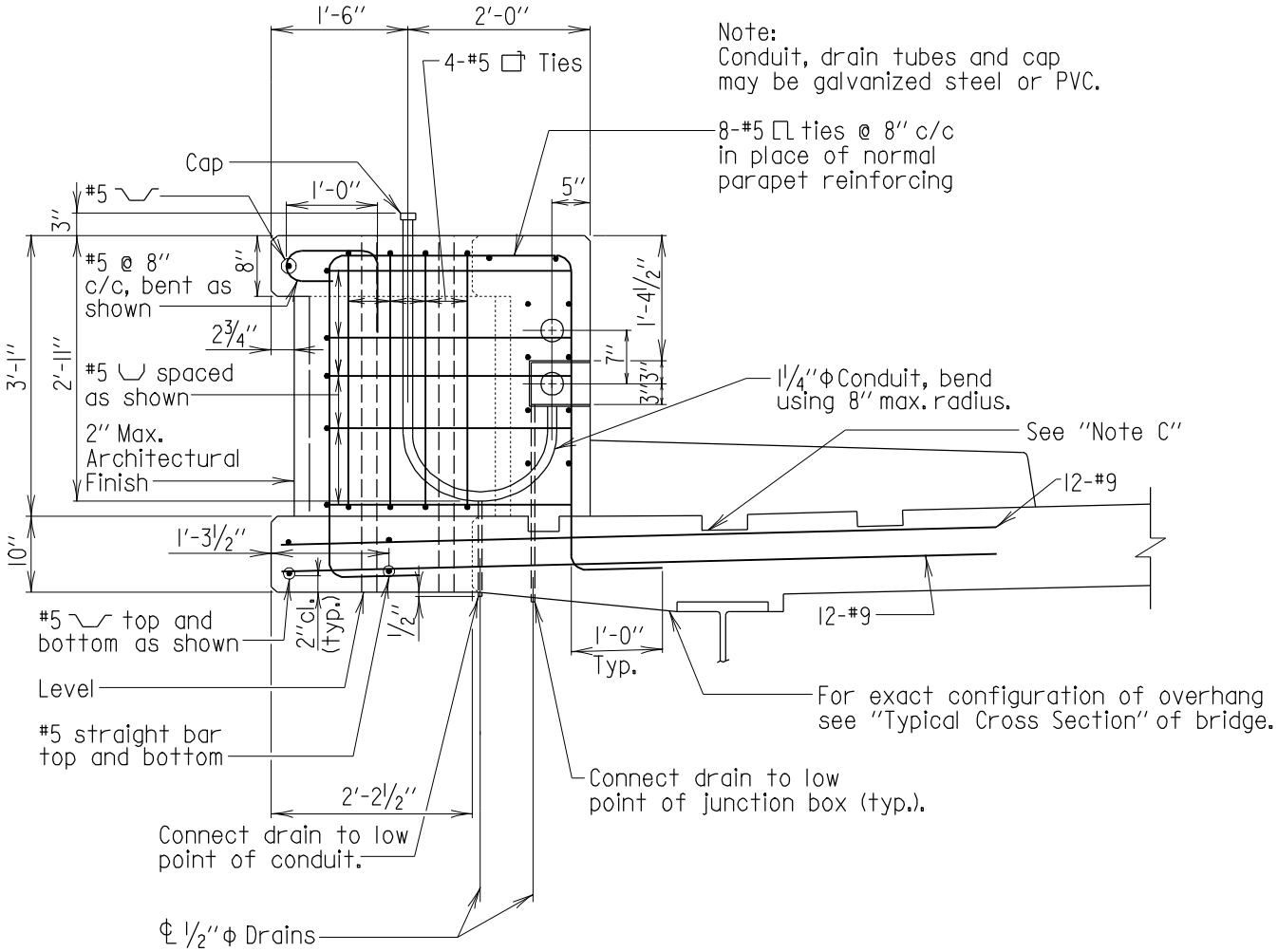
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

VERIFIED 10-9-2007 LRFD

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH DUAL CONDUITS AND PARAPET WITH ARCHITECTURAL FINISH AND SIDEWALK

STANDARD NO. BR-SS(6.57)-05-359(L) SHEET 1 OF 2

SUPER-CONCRETE WORK



SECTION B-B FOR SIDEWALKS WITH PARAPET

Scale: 1/2"=1'-0"

Note:
All longitudinal bars are #5's and shall be placed continuously in the sidewalk from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multispan bridge. Refer to BR-SS(6.48)-03-350.

Note C:
The constr. jt. between the sidewalk and the deck may vary slightly from the joint indicated.
For exact details and location of the joint see "Superstructure" Sheet.

RECESSED BACK WITH SIDEWALK

APPROVAL
C S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
.	.
.	.
.	.
.	.

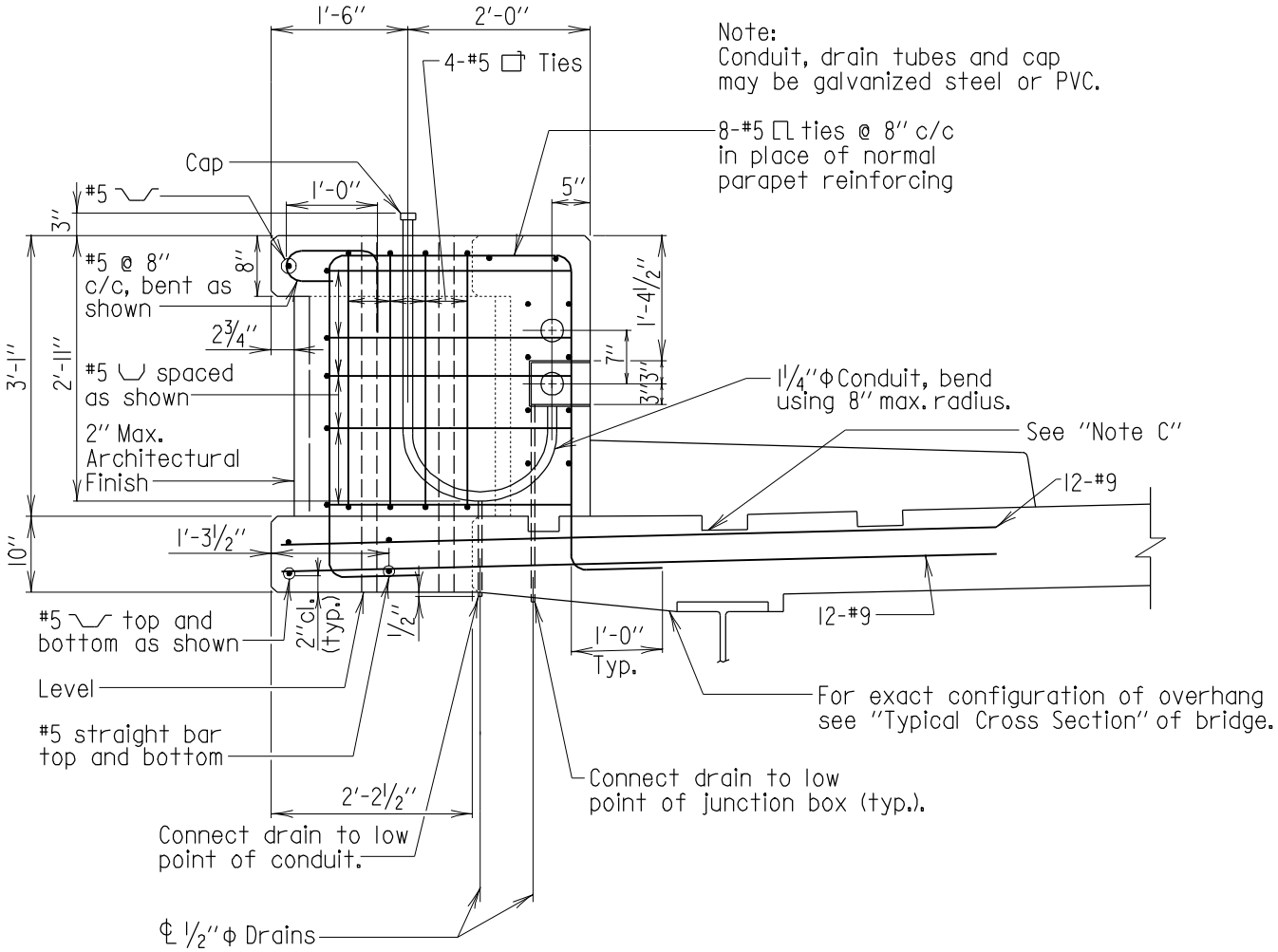
FHWA APPROVAL
DATE: .

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH DUAL CONDUITS AND PARAPET WITH ARCHITECTURAL FINISH AND SIDEWALK

STANDARD NO. BR-SS(6.57)-05-359 SHEET 2 OF 2

SUPER-CONCRETE WORK



SECTION B-B FOR SIDEWALKS WITH PARAPET

Scale: 1/2"=1'-0"

Note:
All longitudinal bars are #5's and shall be placed continuously in the sidewalk from expansion opening to expansion opening in a simple span bridge and expansion opening to centerline of pier in a multispan bridge. Refer to BR-SS(6.48)-03-350.

Note C:
The constr. jt. between the sidewalk and the deck may vary slightly from the joint indicated.
For exact details and location of the joint see "Superstructure" Sheet.

RECESSED BACK WITH SIDEWALK

APPROVAL
C S Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 6/1/05

REVISIONS	
SHA	FHWA
10-9-07	·
·	·
·	·
·	·

FHWA APPROVAL
DATE: ·

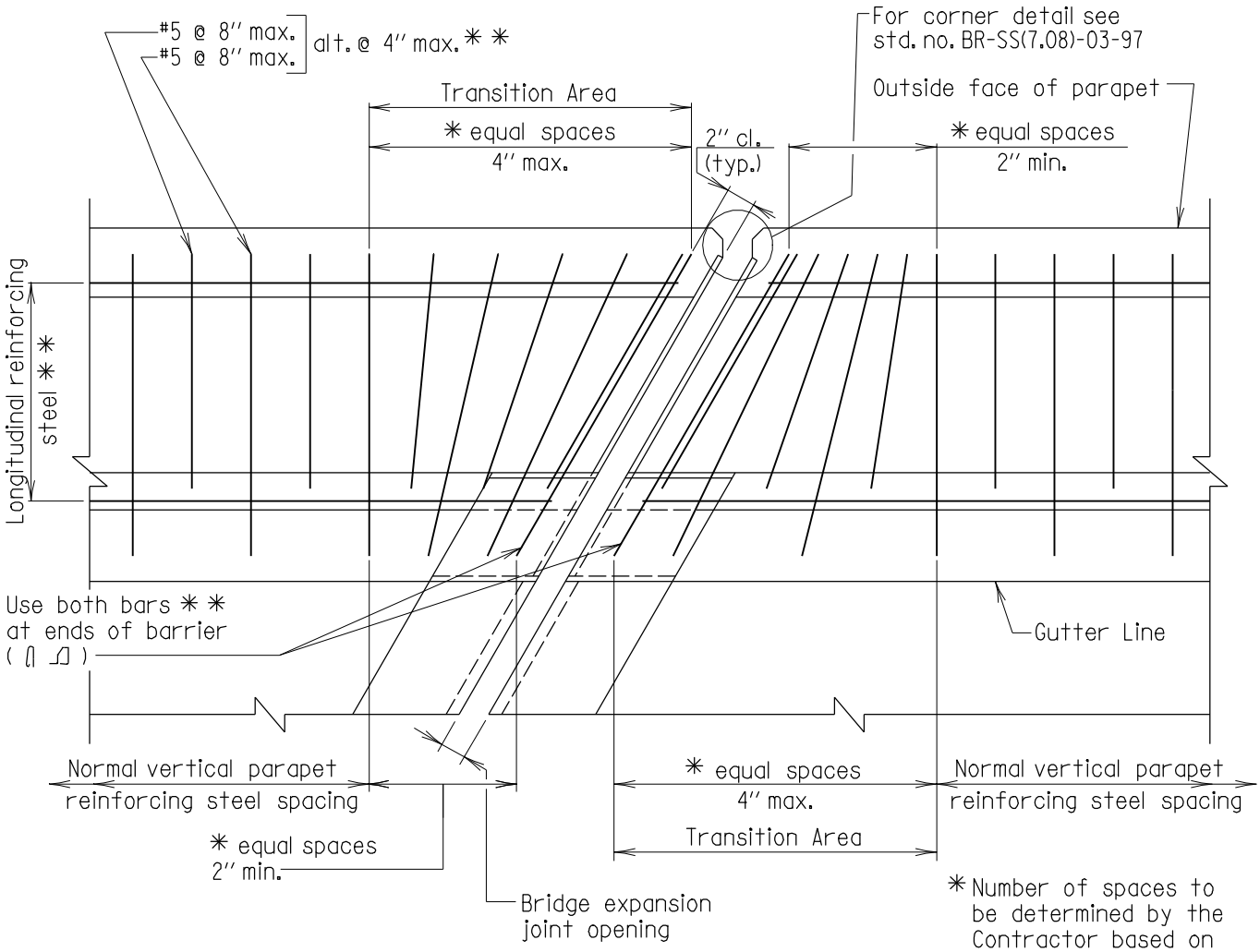
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

VERIFIED 10-9-2007 LRFD

SUPPORT BRACKET FOR BRIDGE MOUNTED LIGHT POST WITH DUAL CONDUITS AND PARAPET WITH ARCHITECTURAL FINISH AND SIDEWALK

STANDARD NO. BR-SS(6.57)-05-359(L) SHEET 2 OF 2

SUPER-CONCRETE WORK



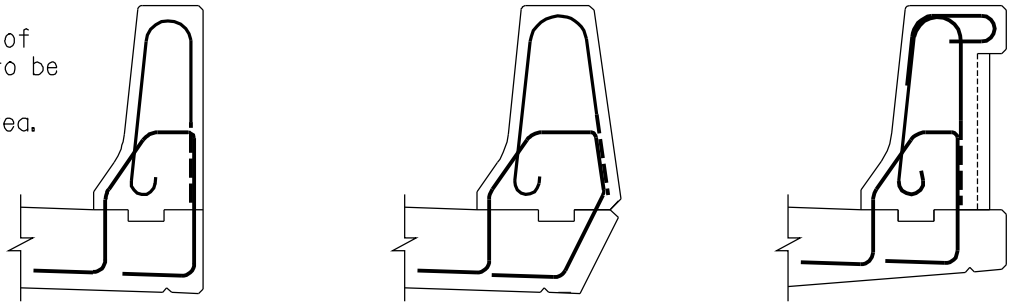
* * Number, shape and size of bars is contingent upon the height and style of parapet that is chosen. See Typical Section for details.

* Number of spaces to be determined by the Contractor based on the skew angle as part of the Shop Drawing Process.

PLAN

Scale: 1" = 1'-0"

Note:
Dashed area of reinforcing to be eliminated in transition area.



REINFORCING PATTERN FOR TRANSITION AREA ONLY

Notes:
1. All reinforcing steel to be epoxy coated.
2. Compression seal not shown.

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 1/18/05

REVISIONS	
SHA	FHWA

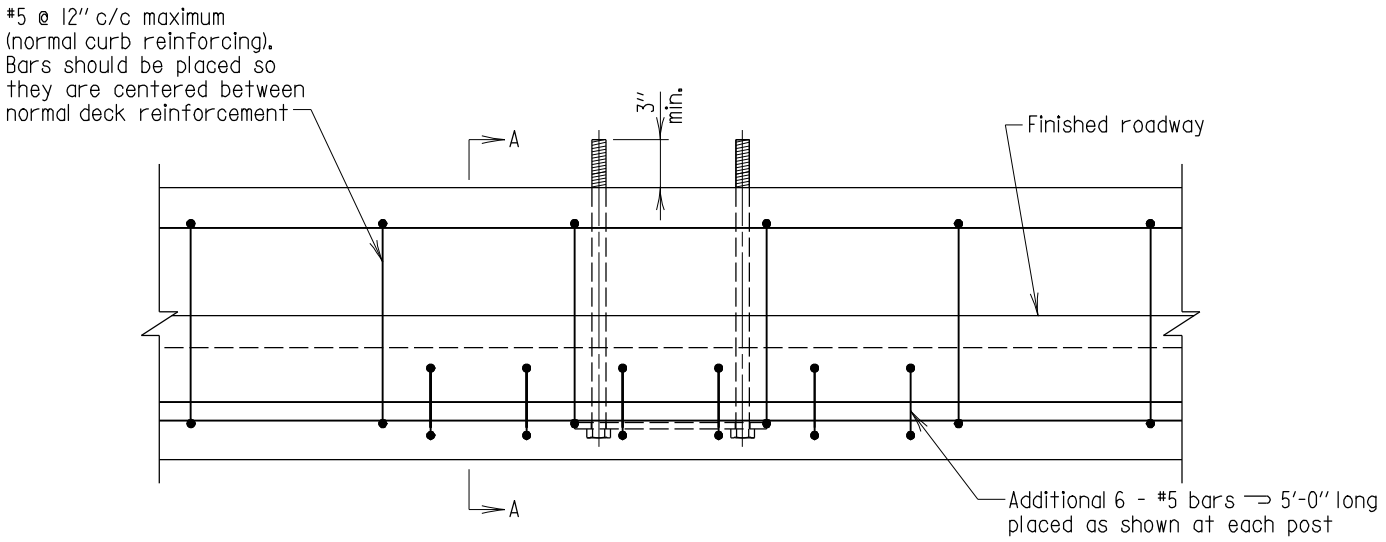
FHWA APPROVAL
DATE:

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

PARAPET REINFORCING STEEL PLACEMENT AT EXPANSION JOINT

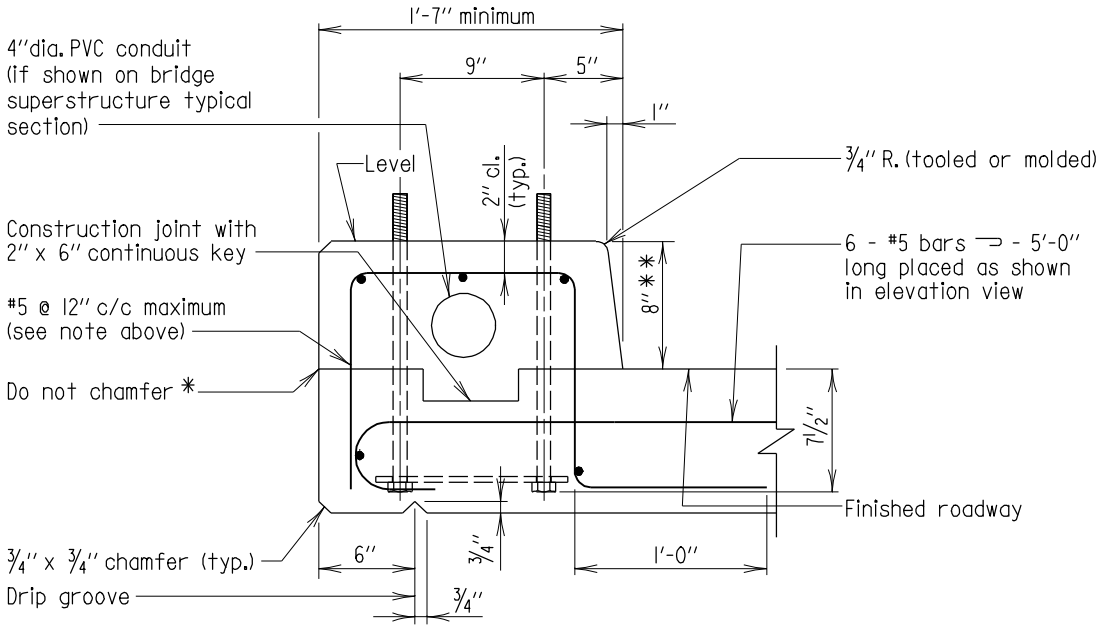
STANDARD NO. BR-SS(6.58)-05-361 SHEET 1 OF 1

SUPER CONCRETE WORK



ELEVATION

Scale: 1" = 1'-0"



SECTION A-A

Scale: 1" = 1'-0"

* In order to insure a smooth and acceptable surface, Section 420.03.11 (Construction joints) will be strictly adhered to.

** May vary with application.

(USE WITH STD. NO. BR-SS(5.07)-07-375)

Notes:
1. All longitudinal bars are #5 spaced as shown.
2. Normal concrete deck reinforcing not shown.
3. All reinforcing steel shall be epoxy coated.

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 2/8/07

REVISIONS	
SHA	FHWA
8-3-07	·
·	·
·	·
·	·

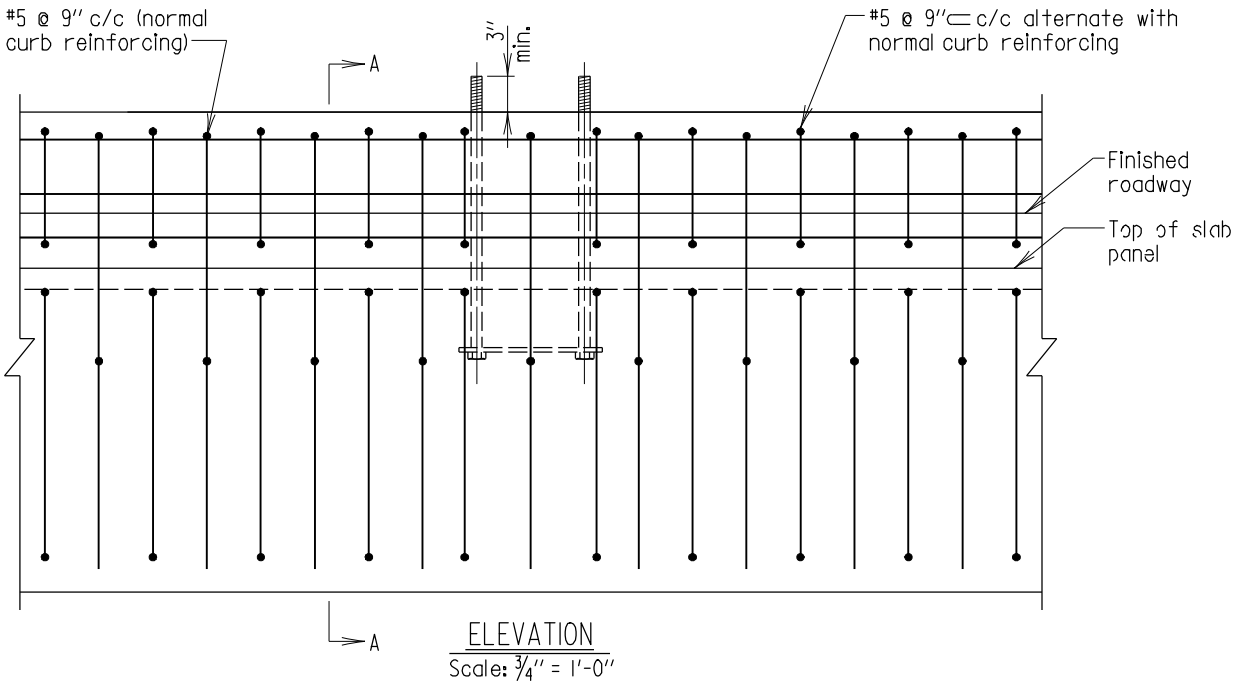
FHWA APPROVAL
DATE: .

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

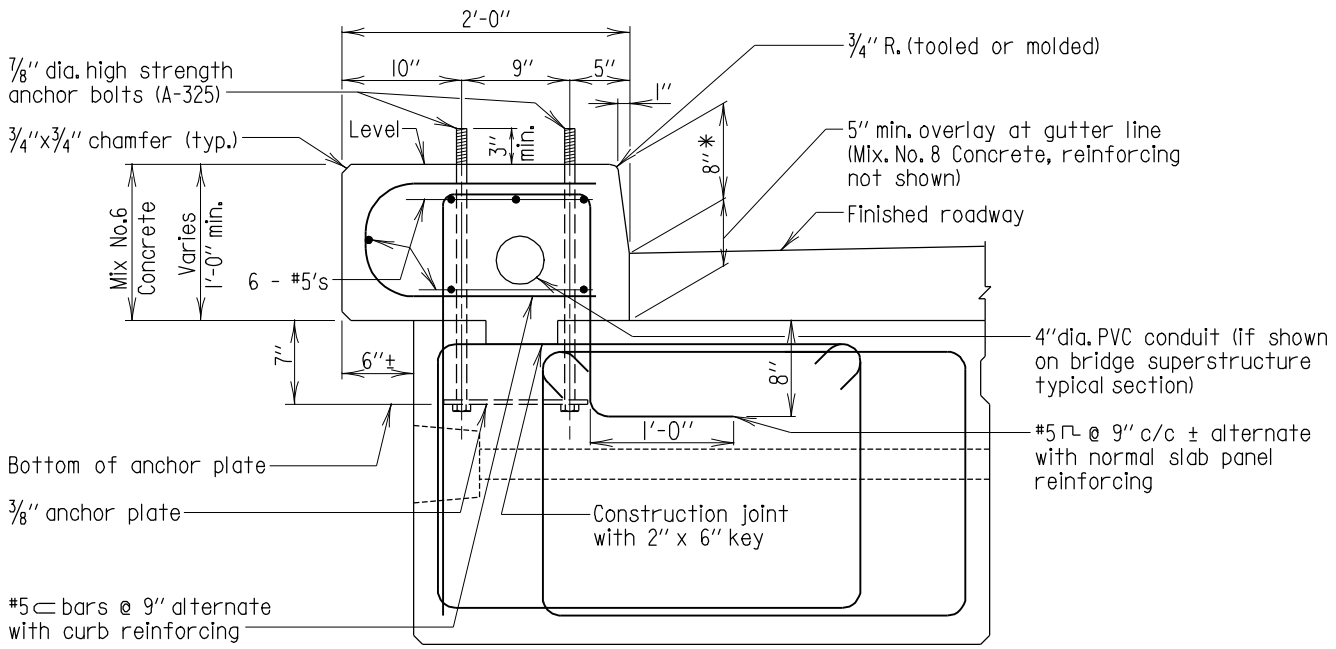
BRIDGE DECK CURB DETAIL

STANDARD NO. BR-SS(6.59)-07-376 SHEET 1 OF 1

SUPER CONCRETE WORK



ELEVATION
Scale: 3/4" = 1'-0"



SECTION A-A
Scale: 3/4" = 1'-0"

Notes:
1. The cost of curb including reinforcing, 4" dia. PVC and AASHTO 153 Type I joint seal will be included in Superstructure Concrete item.
2. The cost of anchor bolts and plates will be included in the Railing item.
3. All reinforcing steel shall be epoxy coated.
4. Longitudinal reinforcing steel in the precast slab panel not shown.
5. Prestressing strands in the precast slab panel not shown.
6. For size and spacing of precast slab panel stirrups see precast slab panel details.

* May vary with application.

(USE WITH STD. NO. BR-SS(5.07)-07-375)

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 2/8/07

REVISIONS	
SHA	FHWA
8-3-07	·
7-21-08	·
·	·
·	·

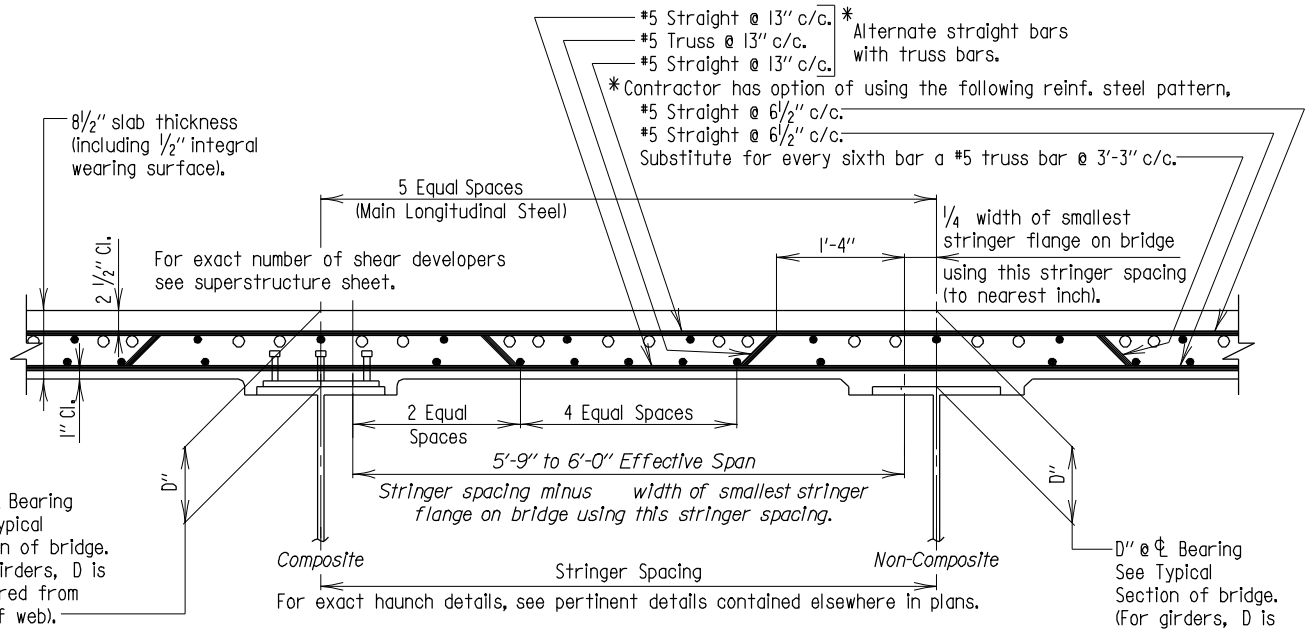
FHWA APPROVAL		
DATE: ·	·	·

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

PRECAST CONCRETE SLAB PANEL CURB DETAIL

STANDARD NO. BR-SS(6.60)-07-377 SHEET 1 OF 1

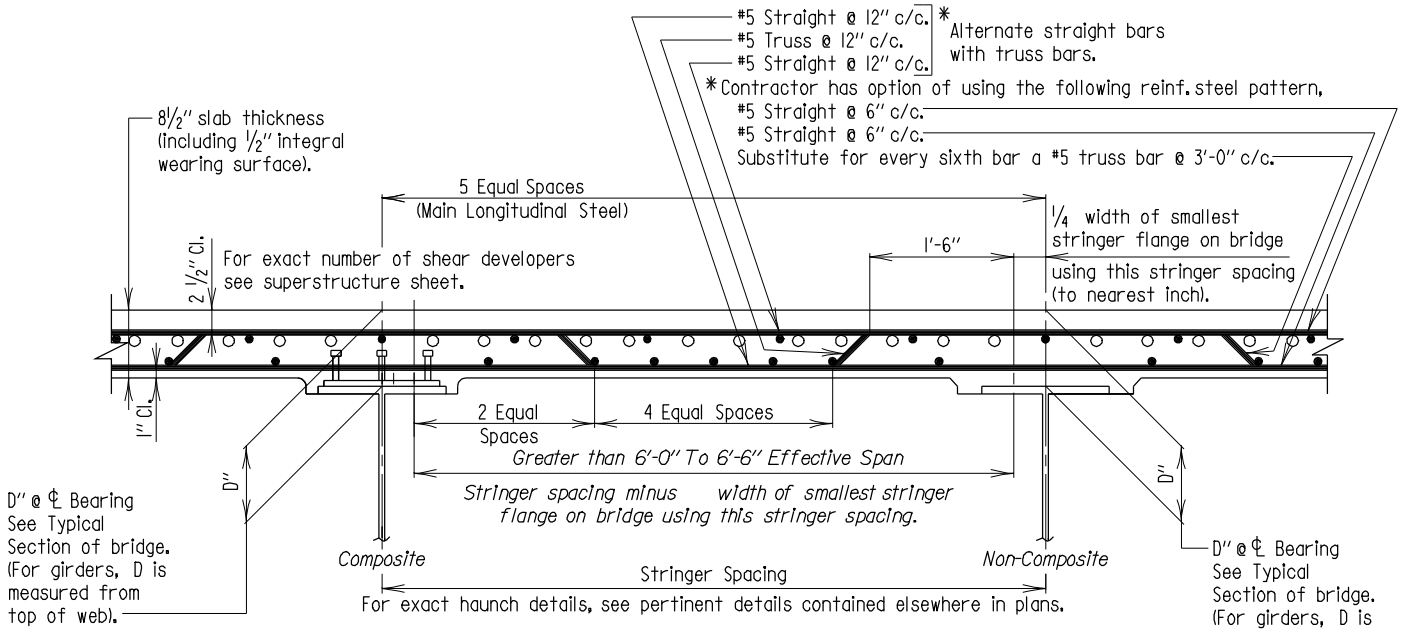
SUPER CONCRETE WORK



HL-93 TYPE XXXI SLAB
5'-9" TO 6'-0" EFFECTIVE SPAN

Scale: ½"=1'-0"

Note:
For effective spans less than 5'-9" see Note 3 on Std. No. BR-SS(6.11)-79-90(L).



HL-93 TYPE XXXII SLAB
GREATER THAN 6'-0" TO 6'-6" EFFECTIVE SPAN

Scale: ½"=1'-0"

Note:
Slanted lettering indicates notes "For Office Use Only".

Note:
1. All steel sizes and spacing based on ASTM A-615, Grade 60 (fs=24,000 p.s.i.).
2. Transverse bars to be placed normal to center line of stringers. (For curved girder see BR-SS(6.11)-79-90(L)).
3. All longitudinal bars are to be #5's placed as shown except if Note 4 requires and indicates larger bars.
4. On continuous bridges, over piers, additional longitudinal steel is to be added to the top of the slab between normal bars and is indicated thus ○. See Detail No. BR-SS(6.30)-88-195 for the lengths and size of these additional bars.
5. *Refer to BR-SS(6.11)-79-90(L) for overhang design requirements.*

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 4/23/08

REVISIONS	
SHA	FHWA

FHWA APPROVAL
DATE: 4-23-08

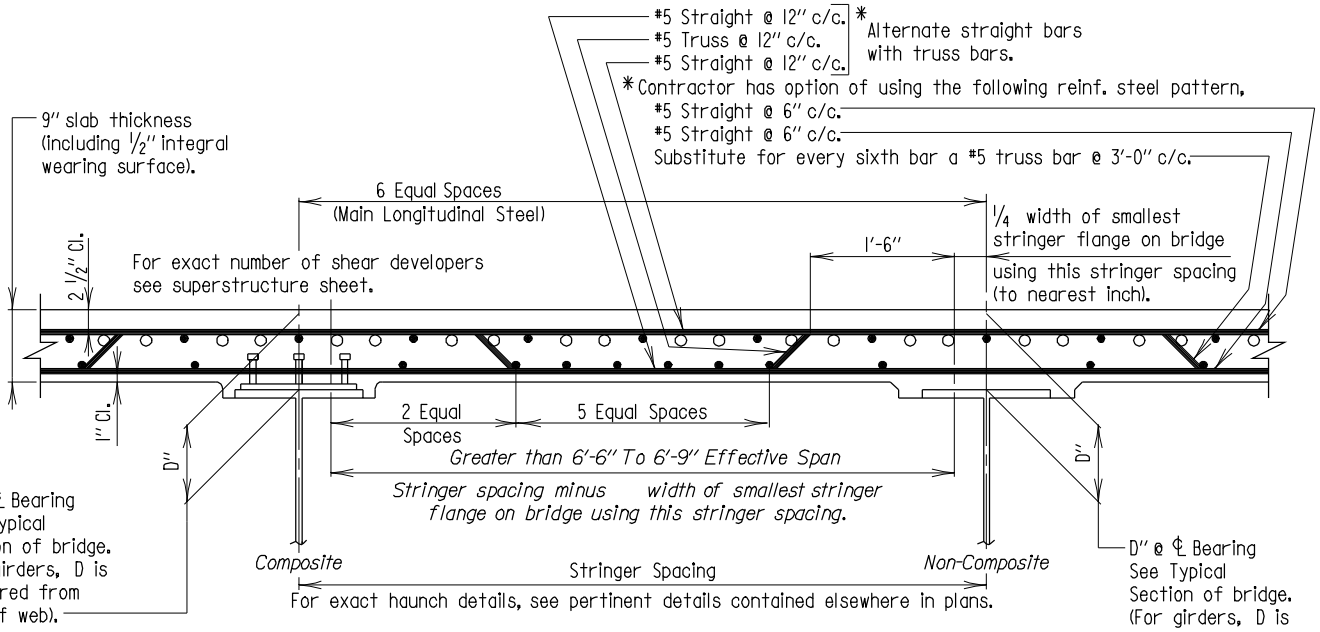
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

VERIFIED 4-23-2008 LRFD

TYPE XXXI AND XXXII BRIDGE DECK SLABS HL-93 LOADING

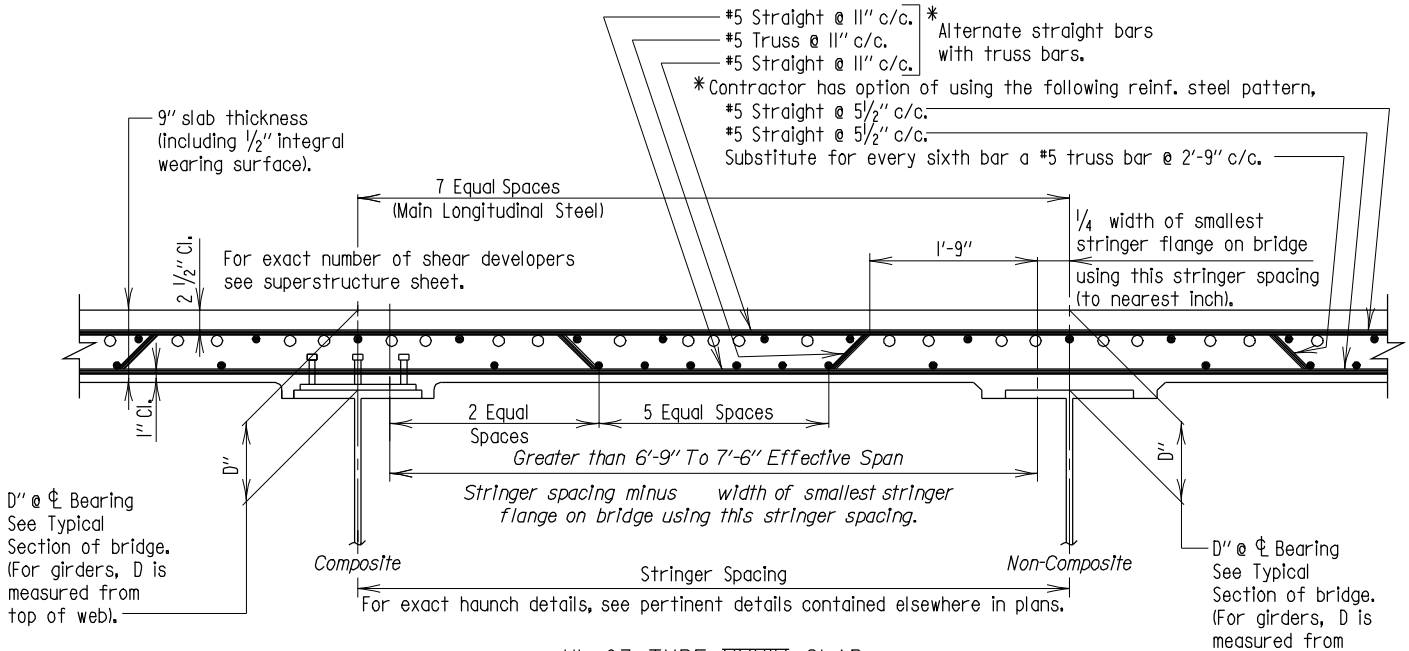
STANDARD NO. BR-SS(6.61)-08-385(L) SHEET 1 OF 1

SUPER CONCRETE WORK



HL-93 TYPE XXXIII SLAB
GREATER THAN 6'-6" TO 6'-9" EFFECTIVE SPAN

Scale: 1/2"=1'-0"



HL-93 TYPE XXXIV SLAB
GREATER THAN 6'-9" TO 7'-6" EFFECTIVE SPAN

Scale: 1/2"=1'-0"

Note:
Slanted lettering indicates notes "For Office Use Only".

Note:
1. All steel sizes and spacing based on ASTM A-615, Grade 60 (fs=24,000 p.s.i.).
2. Transverse bars to be placed normal to center line of stringers. (For curved girder see BR-SS(6.11)-79-90(L)).
3. All longitudinal bars are to be #5's placed as shown except if Note 4 requires and indicates larger bars.
4. On continuous bridges, over piers, additional longitudinal steel is to be added to the top of the slab between normal bars and is indicated thus ○. See Detail No. BR-SS(6.30)-88-195 for the lengths and size of these additional bars.
5. *Refer to BR-SS(6.11)-79-90(L) for overhang design requirements.*

APPROVAL
E.S. Friedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 4/23/08

REVISIONS	
SHA	FHWA

FHWA APPROVAL
DATE: 4-23-08

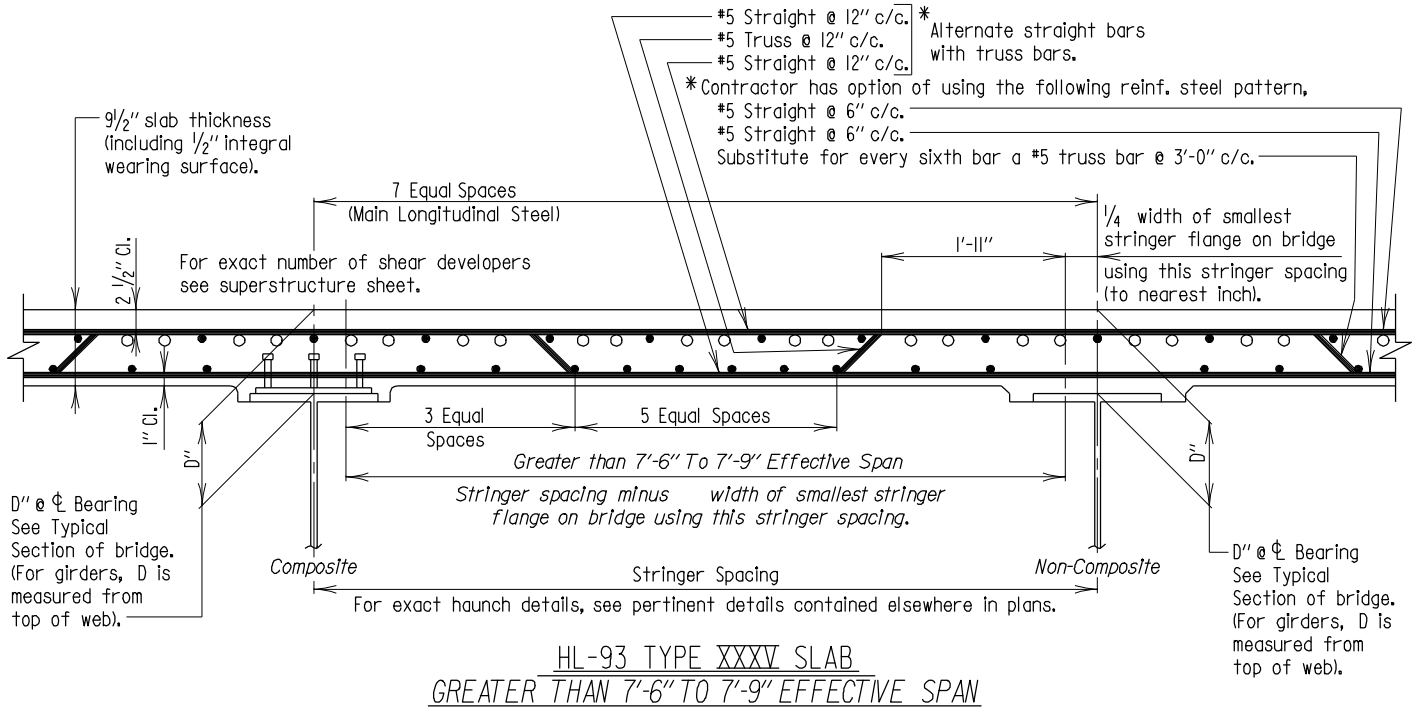
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

VERIFIED 4-23-2008 LRFD

TYPE XXXIII AND XXXIV BRIDGE DECK SLABS HL-93 LOADING

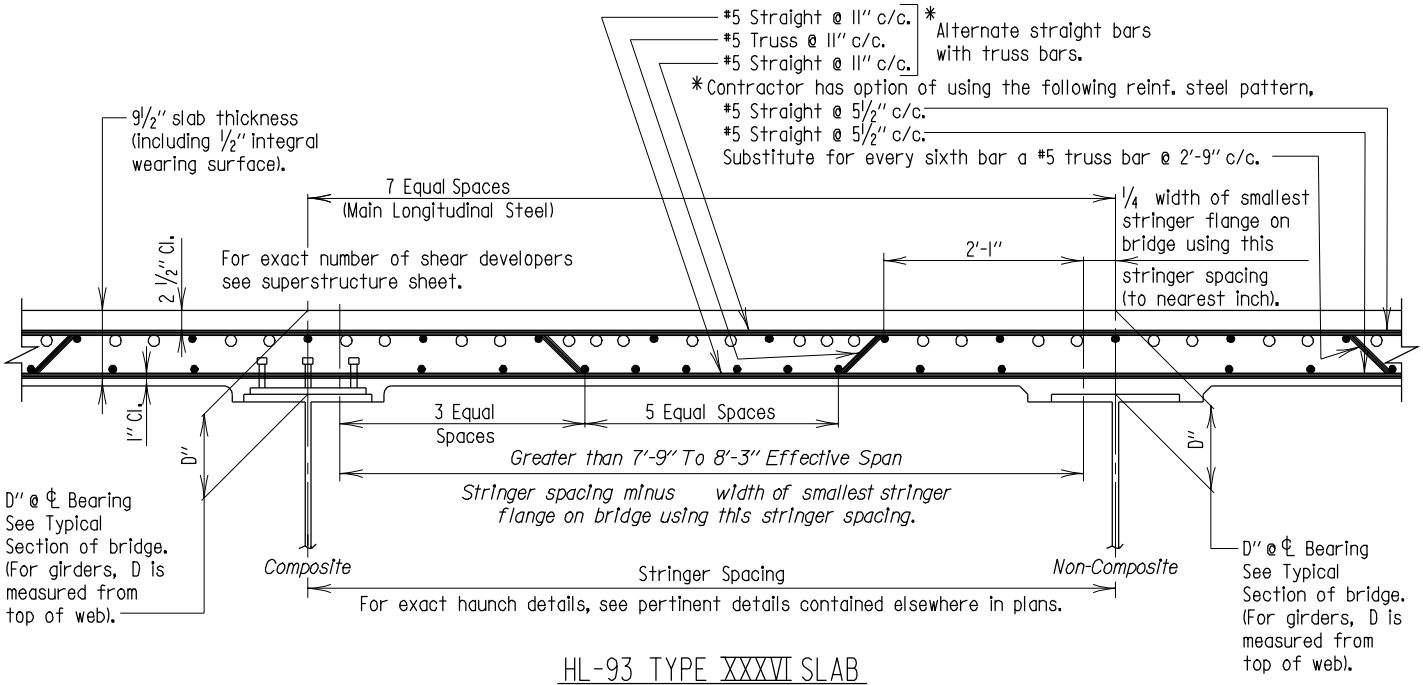
STANDARD NO. BR-SS(6.62)-08-386(L) SHEET 1 OF 1

SUPER CONCRETE WORK



HL-93 TYPE XXXV SLAB
GREATER THAN 7'-6" TO 7'-9" EFFECTIVE SPAN

Scale: 1/2"=1'-0"



HL-93 TYPE XXXVI SLAB
GREATER THAN 7'-9" TO 8'-3" EFFECTIVE SPAN

Scale: 1/2"=1'-0"

Note:
1. All steel sizes and spacing based on ASTM A-615, Grade 60 (fs=24,000 p.s.i.).
2. Transverse bars to be placed normal to center line of stringers. (For curved girder see BR-SS(6.11)-79-90(L)).
3. All longitudinal bars are to be #5's placed as shown except if Note 4 requires and indicates larger bars.
4. On continuous bridges, over piers, additional longitudinal steel is to be added to the top of the slab between normal bars and is indicated thus ○. See Detail No. BR-SS(6.30)-88-195 for the lengths and size of these additional bars.
5. *Refer to BR-SS(6.11)-79-90(L) for overhang design requirements.*

Note:
Slanted lettering indicates notes "For Office Use Only".

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 4/23/08

REVISIONS	
SHA	FHWA

FHWA APPROVAL
DATE: 4-23-08

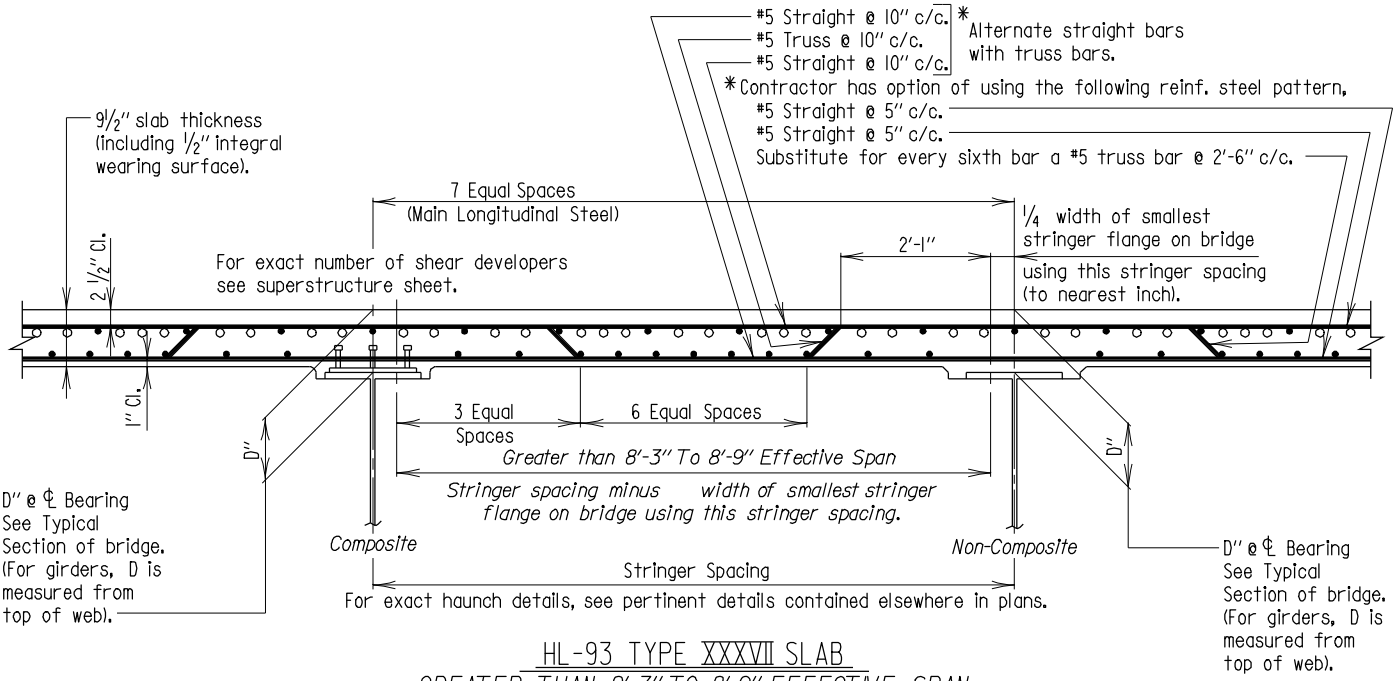
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

VERIFIED 4-23-2008 LRFD

TYPE XXXV AND XXXVI BRIDGE DECK SLABS HL-93 LOADING

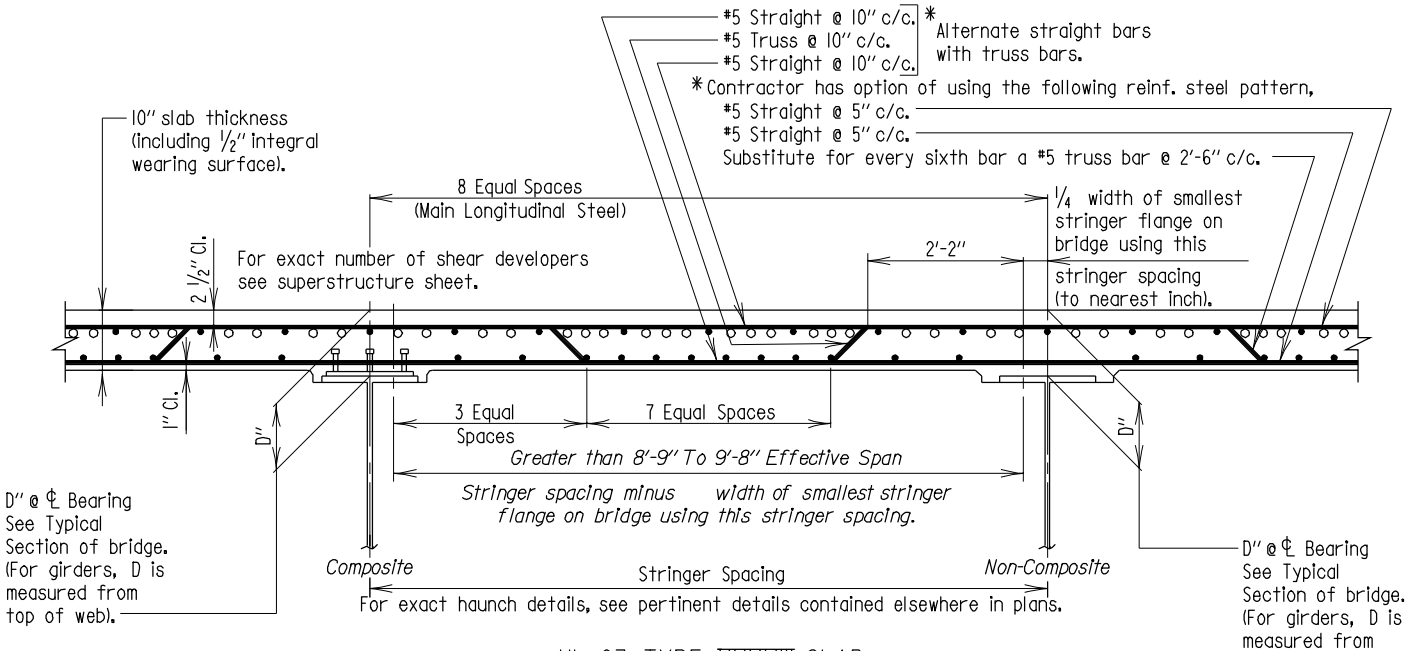
STANDARD NO. BR-SS(6.63)-08-387(L) SHEET 1 OF 1

SUPER CONCRETE WORK



HL-93 TYPE XXXVII SLAB
GREATER THAN 8'-3" TO 8'-9" EFFECTIVE SPAN

Scale: 3/8"=1'-0"



HL-93 TYPE XXXVIII SLAB
GREATER THAN 8'-9" TO 9'-8" EFFECTIVE SPAN

Scale: 3/8"=1'-0"

Note:
Slanted lettering indicates notes "For Office Use Only".

Note:
1. All steel sizes and spacing based on ASTM A-615, Grade 60 (fs=24,000 p.s.i.).
2. Transverse bars to be placed normal to center line of stringers. (For curved girder see BR-SS(6.11)-79-90(L)).
3. All longitudinal bars are to be #5's placed as shown except if Note 4 requires and indicates larger bars.
4. On continuous bridges, over piers, additional longitudinal steel is to be added to the top of the slab between normal bars and is indicated thus ○. See Detail No. BR-SS(6.30)-88-195 for the lengths and size of these additional bars.
5. *Refer to BR-SS(6.11)-79-90(L) for overhang design requirements.*

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 4/23/08

REVISIONS	
SHA	FHWA

FHWA APPROVAL
DATE: 4-23-08

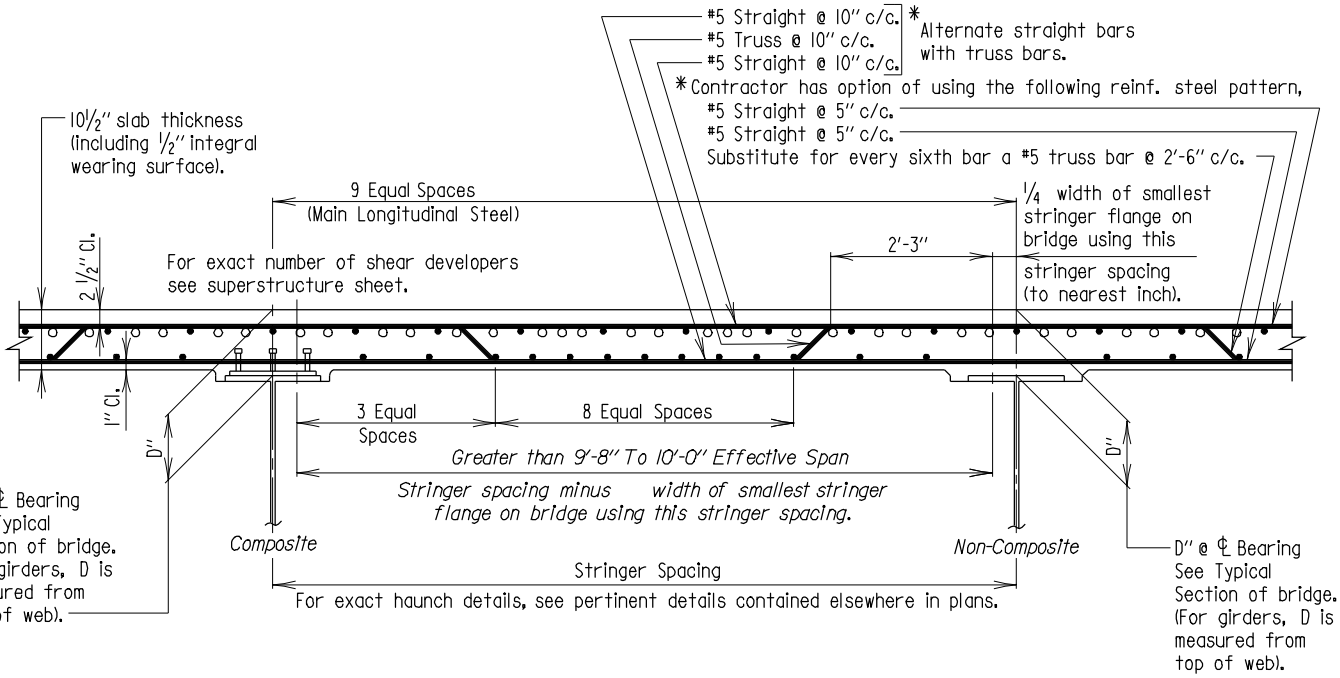
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

VERIFIED 4-23-2008 LRFD

TYPE XXXVII AND XXXVIII BRIDGE DECK SLABS HL-93 LOADING

STANDARD NO. BR-SS(6.64)-08-388(L) SHEET 1 OF 1

SUPER CONCRETE WORK



HL-93 TYPE XXXIX SLAB
GREATER THAN 9'-8" TO 10'-0" EFFECTIVE SPAN

Scale: 3/8"=1'-0"

Note:
1. All steel sizes and spacing based on ASTM A-615, Grade 60 (fs=24,000 p.s.i.).
2. Transverse bars to be placed normal to center line of stringers. (For curved girder see BR-SS(6.11)-79-90(L)).
3. All longitudinal bars are to be #5's placed as shown except if Note 4 requires and indicates larger bars.
4. On continuous bridges, over piers, additional longitudinal steel is to be added to the top of the slab between normal bars and is indicated thus ○. See Detail No. BR-SS(6.30)-88-195 for the lengths and size of these additional bars.
5. *Refer to BR-SS(6.11)-79-90(L) for overhang design requirements.*

Note:
Slanted lettering indicates notes "For Office Use Only".

APPROVAL
E.S. Freedman DIRECTOR OFFICE OF BRIDGE DEVEL.
DATE: 4/23/08

REVISIONS	
SHA	FHWA

FHWA APPROVAL
DATE: 4-23-08

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

VERIFIED 4-23-2008 LRFD

TYPE XXXIX BRIDGE DECK SLAB
HL-93 LOADING

STANDARD NO. BR-SS(6.65)-08-389(L) SHEET 1 OF 1

SUPER CONCRETE WORK